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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

HOMELAND SECURITY PLANNING FOR URBAN AREA SCHOOLS

by

Craig A. Gjelsten

March 2008

Thesis Co-Advisors: David Brannan
Nadav Morag

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Schools in the United States are at risk of a terrorist attack and the country is unprepared. The recent history of terrorist attacks illustrates that the methodology and audacity of terrorists is evolving and increasing. Terrorists no longer differentiate between civilians and military personnel, nor do they discriminate amid gender and age. While the thought of deliberately focusing an attack on children might seem unconventional, or even taboo, terrorism and terrorist tactics have fundamentally changed and terrorists are no longer fearful of taking such drastic action.

This research indicates that we are unprepared and major improvements need to be made. Until serious and significant changes are made, schools remain vulnerable, unprotected targets of terrorist attacks. The consequences of inaction are enormous, being measured in the loss of lives of children. While a terrorist attack cannot always be prevented, there are actions that schools can take to enhance the safety and security of staff and students. This research culminates in specific recommendations for Maine School District 207 and highlights the strategic methodologies and practices that all schools can utilize and employ to become better prepared. A key recommendation is the inclusion of local response agencies starting with the emergency planning process.

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HOMELAND SECURITY PLANNING FOR URBAN AREA SCHOOLS

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

Schools in the United States are at risk of a terrorist attack and the country is unprepared. The recent history of terrorist attacks illustrates that the methodology and audacity of terrorists is evolving and increasing. Terrorists no longer differentiate between civilians and military personnel, nor do they discriminate amid gender and age. While the thought of deliberately focusing an attack on children might seem unconventional, or even taboo, terrorism and terrorist tactics have fundamentally changed and terrorists are no longer fearful of taking such drastic action.

This research indicates that we are unprepared and major improvements need to be made. Until serious and significant changes are made, schools remain vulnerable, unprotected targets of terrorist attacks. The consequences of inaction are enormous, being measured in the loss of the lives of children. While a terrorist attack cannot always be prevented, there are actions that schools can take to enhance the safety and security of staff and students. This research culminates in specific recommendations for Maine School District 207 and highlights the strategic methodologies and practices that all schools can utilize and employ to become better prepared. A key recommendation is the inclusion of local response agencies starting with the emergency planning process.

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I. INTRODUCTION

A. PROBLEM STATEMENT

Schools in the United States are at risk of a terrorist attack, and the country is unprepared. The recent history of terrorist attacks illustrates that the methodology and audacity of terrorists are evolving and increasing. Terrorists no longer differentiate between civilians and military personnel, nor do they discriminate amid gender and age. Terrorist attacks have already transpired at, or in close proximity to, schools in the U.S. and abroad, and are likely to continue and escalate.

In the period from 1968 to 2004, thirty-four separate terrorist-related incidents occurred in educational institutions or on vehicles transporting students to and from them. Five of these occurred in the United States. The most heinous terrorist attack on a school occurred in the small town of Beslan, near the troubled Russian republic of Chechnya in September of 2004. A total of 323 hostages, including 186 children, died in the school terrorist siege. Equally disturbing was the school massacre in "Netiv Meir," an elementary school in Ma'a lot, Israel, on May 15, 1974, the twenty-sixth anniversary of Israeli independence. This attack, in which twenty-one students were killed, was perpetrated by Palestinian members of the Democratic Front for the Liberation of Palestine, who were dressed as Israeli soldiers. While the thought of deliberately focusing an attack on children might seem unconventional, or even taboo, terrorism and terrorist tactics have fundamentally changed, and terrorists are no longer fearful of taking such drastic action.

Several recent comprehensive studies highlight the current state of readiness of schools in the United States. These studies indicate that the country is unprepared and major improvements need to be made, especially in urban area schools. There are five comprehensive reports germane to this topic. Four of the reports are directly related to school preparedness for terrorist attacks. The America Prepared Campaign studied the specific terrorism preparedness in America’s twenty largest school districts. The study measured the performance of the school districts using the Department of Education’s

Practical Information on Crisis Planning: A Guide for Schools and Communities.[1] This guide recommends the steps that all school districts should take to ensure that they are prepared for many different crises, including terrorism. The urban area Chicago Public Schools (CPS), received a failing grade. Andres Durbak, the CPS Director of Safety and Security estimates that 25 to 50 percent of the city's schools do not have satisfactory emergency plans, much less practice them.[2] Many of the CPS schools do not have the basic emergency supplies that the city's own website urges families to have at home in a "ready kit" despite the fact that the district's schools are home for over 400,000 children. In fact, the U.S. Department of Education reports that nearly 60 million children, 20 percent of the U.S. population, attend the nation's 119,000+ schools.[3]

Unfortunately, poor planning for terrorist attacks is germane not only to the Chicago Public Schools, but nationwide. Despite some advancement, there is an alarming consensus that school emergency preparedness and readiness varies widely. A 2005 national survey of School Resource Officers (SRO) illustrated the following: 92 percent of SRO's believe that schools are "soft targets" for potential terrorist attacks, 74 percent of SRO's believe that their schools are inadequately prepared to respond to a terrorist attack, half said that emergency plans for their schools are not adequate, and 66 percent of SRO's indicated that their emergency plans are not practiced on a regular or ongoing basis.[4]

A May 17, 2007 report by the United States Government Accountability Office (GAO) asserts that recent events such as school shootings and the 9/11 terrorist attacks

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[1] United States, Department of Education, *Practical Information on Crisis Planning: A Guide for Schools and Communities* (Washington, DC: U.S. Department of Education, 2003), 1-9. http://www.ed.gov/admins/lead/safety/emergencyplan/crisisplanning.pdf (Accessed January 9, 2008).

[2] Allison Phinney, *Preparedness in America's Schools: A Comprehensive Look at Terrorism Preparedness in America's Twenty Largest School Districts* (American Prepared Campaign, Inc., September 2004), 5. http://www.workplaceviolence911.com/docs/20040916.pdf (Accessed August 20, 2007).

[3] United States, Secret Service and the United States, Department of Education, *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States* (Washington, DC: U.S. Department of Education, 2002), 7. http://www.ustreas.gov/usss/ntac/ssi_final_report.pdf (Accessed January 9, 2008).

[4] National School Safety Center, *NCSS Review of School Safety Research* (Westlake Village, CA: National School Safety Center, 2006), 4.

have heightened awareness for the need for school districts to be prepared to address a range of emergencies within and outside of schools buildings. The GAO reports that only thirty-two states have laws or policies requiring school districts to have emergency management plans. An estimated 62 percent of school districts identified challenges related to a lack of equipment, training for staff, and personnel with expertise in emergency planning.[5]

Urban area schools are a higher profile target than rural schools because they have large student populations and are generally located in or close to major population centers thus allowing terrorists more opportunities for access as well as providing greater anonymity. This in turn can make it easier for terrorists to gather intelligence with respect to the target. Until serious and significant changes are made, urban area schools remain vulnerable, unprotected targets for terrorist attacks. The consequences of inaction are enormous, being measured in the loss of lives of children.

Finding and allocating funding sources to implement safety and security measures presents significant challenges as well. Schools must compete for tax dollars in an environment of disgruntled citizens, continually demanding additional services while concurrently expecting a reduction in costs. School districts must share tax revenue with other taxing bodies including the federal, state and local governments. In this extremely competitive environment, it is often difficult for school districts to support existing programs, much less propose and fund new program areas. Many urban school districts continually operate at a deficit and regularly depend upon referendums just to remain fiscally viable. Most school districts will not increase budgets to enhance security measures, as security is not considered an essential priority. Unfortunately, only an attack on a school will change this mindset.

[5] United States. Government Accountability Office, *Emergency Management: Status of School Districts' Planning and Preparedness* (Washington, DC: U.S. Government Accountability Office, 2007), 1. http://www.gao.gov/new.items/d07821t.pdf (Accessed December 21, 2007).

B. RESEARCH QUESTIONS

The primary overarching question driving this research is:

"Given the current security environment, what measures can be implemented to better protect schools in urban areas from acts of terrorism?"

Here are several tertiary questions that will frame and direct the research:

1. Which acts of terrorism have been perpetrated on schools in the U.S. and abroad?
2. What makes children/schools an attractive target for terrorists?
3. Which types of attacks are possible or probable?
4. Which types of security measures are available to protect schools?
5. Which measures can be put into place in urban-area schools to prevent, protect against, and minimize the effects of terrorist attacks that do occur?
6. Can these measures be used as a model locally, regionally or at the national level?

C. RESEARCH METHODOLOGY

This research project utilized various facets of the Policy Options Analysis and Case Studies methodologies. The Policy Options analysis defines the problem, identifies alternative solutions, selects criteria to judge outcomes, projects the outcome of each of the proposed alternative solutions and finally identifies the recommended solution(s). These dimensions and elements directly correlate with the established research questions. An examination of what types of security measures are currently available to protect schools lends it self to the policy options analysis. In evaluating different policies to protect schools, the Policy Options Analysis provided for preparedness metrics to be developed with which to measure the efficacy of different policies and then apply this to the analysis of options.

The Case Study method was utilized to examine three identified cases relevant to answering the research questions. This research thoroughly reviews and analyzes the policies or programs of two large school districts (Fairfax, Virginia and Chicago, Illinois) and critically contrasts and compares them against the policies and programs of Park Ridge School District 207 based upon previous study criteria coupled with preparedness metrics developed by the author. Also explored were the experiences of Russia, Israel and the United Kingdom in providing school protection and the lessons learned that can be applied to school protection in the United States.

The general components of the research were a threat analysis, prevention and deterrence, preparedness, emergency response, recovery, and recommendations. The threat analysis chapter examines the rationale to attack a school; the history of school attacks, which illustrates previous motivation and methods; current threat indicators, which highlight current activities occurring that suggest a possible attack; understanding the motivation of terrorists to attack a school and children; and finally, the types of potential attack methods which could be used.

The prevention and deterrence chapter appraises intelligence gathering and fusion, and risk and vulnerability assessments, which includes an analysis of the unique vulnerabilities of children, and the vulnerability of infrastructure and the school transportation system. The preparedness chapter assesses planning, organization, equipment, training, exercises, and developing psychological resiliency in the pre-event phase. The emergency response chapter assays potential threat response, event specific response, and supporting psychological resiliency during the event phase. The recovery chapter critically examines sustaining psychological resiliency in the post event phase and delves into the necessity to plan for continuity of operations after a significant event.

This research culminates in specific homeland security recommendations for District 207, and strategic recommendations that possess utility for any school district. The analysis element of this research also contains recommendations interspersed throughout the aforementioned chapters as the analysis and recommendations are inextricably linked and therefore examined concurrently. These recommendations are gleaned from the literature, school safety conferences and classes. The final

recommendations are a function of the research synthesized with an analysis of the case studies and the author's personal experiences in the field of homeland security.

D. SIGNIFICANCE OF RESEARCH

1. Literature

This research will add significantly to the existing, yet nascent body of literature. It attempted to draw conclusions based upon various existing arguments and highlight the similarities as well as the differences. It also endeavored to identify trends or patterns in the existing literary arguments.

2. Future Research Efforts

This research will benefit future research efforts by having gone beyond the routine investigation and recapitulation of what is already known by striving to develop actionable solutions to the identified problems.

3. The Immediate Consumer

The immediate consumer will be School District 207, which is comprised of three large high schools with a combined student enrollment of more than seven thousand students. Local public safety agencies with accountability to respond to this district as part of their jurisdictional boundaries will also benefit.

4. Practitioners and Leaders

Ideally, the final recommendations can be utilized as a framework for school emergency preparedness locally, regionally and nationally.

E. LITERATURE REVIEW

The threat of terrorism against schools in the United States is a relatively new, but legitimate concern and the literature reflects that. The literature supporting this research is nascent and can be appropriately categorized into the following eight sub-literatures:

(a) federal government documents, discussing general terrorism on a macro level; (b) state government documents, discussing terrorism on a micro level; (c) scholarly journal articles, discussing terrorism specific to children and schools; (d) trade journal, newspaper and magazine articles, discussing terrorism related to children and schools; (e) textbooks specifically examining the issue of terrorism and schools; (f) studies and reports evaluating the preparedness of various school districts in the United States; (g) related unclassified intelligence reports; (h) commercial information and; (i) conference materials.

1. Federal Government Documents

There are numerous government documents either directly or tangentially related to this research topic. The literature indicates that educational institutions are often overlooked as a potential target. The National Strategy for Protection of Critical Infrastructure and Key Assets lists eleven sectors: water, power and energy, information and telecommunications, chemical industry, transportation, banking and finance, defense industry, postal and shipping, agriculture and food, public health and emergency services. The only mention of schools in the entire document is that they are a consumer of electricity.[6] The Department of Homeland Security's (DHS) list of 77,069 high-risk sites does not include any educational institutions, as it is assumed that local and regional authorities will assume responsibility for their protection.[7]

The National Response Plan was signed off on by the Secretary of Education at the time, Rod Paige, but only mentions schools twice in the 426-page document; once on page 68 as it relates to defining local government, and once in the Biological Incident Annex as it relates to epidemiological medical surveillance and school absences.[8]

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[6] President of the United States, *National Strategy for Protection of Critical Infrastructure and Key Assets* (Washington, DC: Government Printing Office, 2003), 50. http://www.whitehouse.gov/pcipb/physical_strategy.pdf (Accessed January 8, 2008).

[7] Peter K. Forster, "Beslan: Counter-terrorism Incident Command: Lessons Learned," *Homeland Security Affairs* II, no. 3 (October 2006): 1-7. http://www.hsaj.org/?article=2.3.3 (Accessed January 15, 2007).

[8] United States, Department of Homeland Security, *National Response Plan* (Washington, DC: DHS, 2003), 50.

Similarly, the National Strategy for Homeland Security also mentions schools only twice; once as it relates to mentioning where Americans congregate[9] and once in making the argument that while schools are critical to the communities they serve, they are not critical to the nation as a whole.[10]

Alternatively, there are documents published by the Federal Emergency Management Agency (FEMA) and the Department of Education (DOE) that convey a sense of exigency and acknowledge the importance of protecting schools from acts of terrorism. FEMA published its "Primer to Design Safe School Projects in Case of Terrorist Attacks" in December of 2003 with the purpose of providing school administrators with the basic principles and techniques to make a school that is safe from terrorist attacks.[11]

Likewise, in August 2003, FEMA published the document: *Building a Disaster-Resistant University*.[12] While this document recognizes the necessity to protect universities as well as subordinate educational facilities, it focuses on an "all-hazards" approach. In fact, a hazard table in the document outlines floods, earthquakes, tsunamis, tornados, coastal storms, landslides and wildfires while terror attacks are not mentioned anywhere in the document. It is unclear why the otherwise comprehensive document excludes terrorism, when universities and college campuses present many unique opportunities for terrorists. Some universities engage in research that is considered controversial by many. The University of California at Los Angeles is currently considering possible lawsuits against animal rights activists that have targeted researchers and their families.

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[9] United States, Department of Homeland Security, *National Strategy for Homeland Security* (Washington, DC: DHS, 2003), 7. http://www.whitehouse.gov/homeland/book/nat_strat_hls.pdf (Accessed January 8, 2008).

[10] Ibid., 30.

[11] Federal Emergency Management Agency, *Primer to Design Safe School Projects in Case of Terrorist Attacks Risk Management Series* FEMA 428 (Washington, DC: FEMA, 2003), 1. http://www.fema.gov/pdf/plan/prevent/rms/428/fema428.pdf (Accessed January 8, 2008).

[12] Federal Emergency Management Agency, *Building A Disaster Resistant University* FEMA 443 (Washington, DC: FEMA, 2003), 25. http://www.fema.gov/library/viewRecord.do?id=1565 (Accessed January 8, 2008).

Additionally, at the federal level, the U.S. Department of Education has published several resources for schools to utilize to better prepare for emergencies in general. In response to the terrorist attack on a school in Beslan, Russia, the U.S. Department of Education Deputy Secretary, Eugene Hickok, issued a formal letter to all schools regarding the incident. While the letter emphasized that there was no reported risk to U.S. educational institutions at that time, it nonetheless outlined specific protective measures that schools in the U.S. can take to be better prepared.[13] The U.S. Department of Education also published its *Practical Information on Crisis Planning: A Guide for Schools and Communities* in May 2003. While virtually absent in the previously mentioned documents, this is the first federal document found during this research that recognized the criticality of involving public safety agencies in the planning process. This guide contends that "crisis plans should be developed in partnership with other community groups, including law enforcement, fire safety officials, emergency health services, as well as health and mental health professionals."[14]

A May 2007 report by the United States Governmental Accountability Office titled *Emergency Management: Status of School Districts' Planning and Preparedness* was created in response to Congress' concerns regarding school preparedness and specifically how federal agencies provide assistance to school districts. The document critically examines: (1) the roles of federal and state government in establishing requirements and providing resources to school districts for emergency planning, (2) what school districts have done to plan and prepare for emergencies, and (3) the challenges that school districts have experienced in planning for emergencies, and communicating with first responders, parents and students.[15]

Finally, available federal literature also indicates that there are new technologies available to help protect school and the students contained therein. The National Institute of Justice reports on a successful biometric system being utilized in New Jersey schools.

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[13] United States, Department of Education, Press Release from the Deputy Secretary, October 6, 2004, 1. http://www.ed.gov/policy/elsec/guid/secletter/041006.html (Accessed January 10, 2008).

[14] US DOE, *Practical Information*, 1.

[15] US GAO, *Emergency Management*, 1.

The Iris Recognition Project, also known as T-PASS (an acronym for Teacher-Parent Authorization Security System) identifies people using cameras that focus on 240 separate points in their eyes. The cameras are linked with computers to identify people that have been preauthorized and allows entry by automatically unlocking secure entryways.[16]

2. State Government Documents

The State of Illinois has been relatively active in the arena of crisis and contingency planning for schools and the available literature heralds that. Public Act 094-0600 (105 ILCS 128) - the School Safety Drill Act was signed into law August 16, 2005. Its purpose is to have public and private schools review their plans with first responders and to conduct school safety drills.[17] The Act "establishes the minimum requirements and standards for schools to follow when conducting school safety drills and reviewing school emergency and crisis response plans and to encourage schools and first responders to work together for the safety of children."[18] Additionally, Title 29 part 1500, Joint Rules of the Office of the State Fire Marshal and the Illinois State Board of Education: School Emergency and Crisis Response Plans, establishes requirements for the annual review and updating of the protocols and procedures that is required in each school's emergency and crisis response plan required by the aforementioned School Safety Drill Act.[19]

3. Scholarly Journal Articles

There is a paucity of literature on this subject available in scholarly journals. What is available is embryonic and limited in scope. One article, "Schools and

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[16] Jeffrey P. Cohn, "Keeping an Eye On School Security: The Iris Recognition Project in New Jersey Schools," *NIJ Journal* no. 254 (July 2006). http://www.ojp.usdoj.gov/nij/journals/254/iris_recognition_print.html (Accessed January 18th, 2007).

[17] Illinois State Board of Education, *ISBA/OSFM All Hazard Preparedness Guide for Illinois Schools*. (Springfield, IL: State of Illinois, 2006), 32. http://www.isbe.state.il.us/safety/default.htm (Accessed October 26, 2006).

[18] Ibid.

[19] Ibid.

Terrorism," in the Journal of School Health clearly stands apart from the other literature and offers a wealth of information on the subject.[20] This article covers a myriad of issues concerning schools and terrorism. The author argues that schools are vulnerable to terrorism for several reasons. Schools are obviously places where large numbers of children gather on a daily basis. Every day, 53 million children attend more than 119,000 public and private schools. Schools are essentially "*in loco parentis*," which translates "in the place of the parent," hence school officials have a special responsibility for the students' care.[21] The author also contends that while many national preparedness activities are underway, there is no coordination between the various activities. Collaboration between education, public health, and emergency responders at the state and local level is key.[22]

Another informative scholarly journal article is "Terrorist Attacks Against Children: Vulnerabilities, Management Principles and Capability Gaps," by Mark Brandenburg and James Regens.[23] While the authors wrote the article from a healthcare perspective, the article contains a wealth of interconnected information. The authors contend that the risk of children being targeted by terrorists is evidenced by the fact that children who have been placed in danger, injured or killed generate an enormous emotional impact on the community and in the media. They cite not only the attack in Beslan, but also point out that the attackers on the Murrah Federal Building in Oklahoma City killed nineteen children in the attack. They highlight that "experts think it is plausible that schools, daycare centers, and other locations where children congregate in the U.S. are just as vulnerable to terrorism (as Beslan)."[24] The authors also demonstrate many reasons why children are more vulnerable and susceptible to terrorist attacks than adults, citing emotional differences, dependency on guardians for safety and emotional

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[20] "Schools and Terrorism," 39-51.

[21] Ibid., 41.

[22] Ibid., 43.

[23] Mark Brandenburg and James Regens, "Terrorist Attacks Against Children: Vulnerabilities, Management Principles and Capability Gaps," *Journal of Homeland Security and Emergency Management* 3, no. 4 (2006): 1-17.

[24] Brandenburg and Regens, "Terrorist Attacks Against Children," 1.

needs, and the need for a guardian to find basic resources.[25] The article also covers the uniqueness of pediatric anatomy and physiology and their effect on surviving terrorist attacks. The greater relative body surface area of children places them at great risk for more rapid skin absorption of chemical agents or toxins.[26] The skin of very young children is also less able to heal after injury from vesicant exposure.[27]

A critical position in protecting schools against terrorism is that of the school nurse. In "Bioterrorism Knowledge and Emergency Preparedness Among School Nurses," the authors claim that the 47,000 nurses in U.S. schools provide the resources that bridge the gap between schools, students, families and the healthcare community and that contrary to hospitals and other facilities, schools have a small number of people present with medical training.[28] The authors point out that school nurses are critical due to a lack of basic medical training by other school staff. A study of teachers in Missouri, Arkansas and Kansas revealed that one third had not received training in first aid, and 40 percent had not received training in cardiopulmonary resuscitation. The data indicated that public school teachers "lack the adequate emergency care knowledge and skills" due to a lack of training and incentives for training.[29] This revelation, coupled with the fact that schools are essentially "*in loco parentis*," and that school officials have a special responsibility for the students' care is especially troubling. There seems to be a gap in the public's expectation of teachers and the emergency care they can actually provide in times of crisis.

On balance, Feldman highlights the bravery displayed by teachers in New York immediately in the aftermath of 9/11. She stated:

> Within minutes, the children were plunged into darkness, breathing air thick with smoke and fear. But every single child escaped and was safely

[25] Brandenburg and Regens, "Terrorist Attacks Against Children," 3.

[26] Ibid., 4.

[27] Ibid., 11.

[28] Sara Evers and Laura Puzniak, "Bioterrorism Knowledge and Emergency Preparedness Among School Nurses," *Journal of School Health* 75, no. 6 (August 2005): 232-237.

[29] Ibid., 232.

> delivered to grateful parents; not one was lost. What saved them? The courageous and clear-headed actions of their teachers, principals, and other school staff.[30]

Conversely, Feldman also acknowledges that the teachers, principles and other staff had no preparation for dealing with this magnitude and that they reacted based on the instinct to protect the children and partly what they knew as educators.[31]

What this literature seems to indicate is that experts agree that schools are at risk for terrorism and children are especially vulnerable. They also appear to agree that there are gaps between education, public health, and emergency responders at the state and local level and there is a lack of emergency preparedness training among teachers and school staff. The question unanswered by this literature is "why do these gaps exist and how can they be closed?"

4. Trade Journals, Newspaper, Magazine and Internet-Based Articles

This sub-literature accounts for a significant amount of the total literature available specific to this topic. The Homeland Defense Journal provides a wealth of information written by subject matter experts. As with previously discussed literature, Philpott in the Homeland Security Journal makes a strong argument that schools are considered viable terrorist targets for several reasons. Among several other things, an attack on schools would instill nationwide panic, promote the power and reputation of a terrorist group, and warrant national media coverage.[32] Abdullaev concurs with Perkins regarding schools being viable terrorist targets. In discussing the Beslan incident, he avows that the choice of targeting vulnerable children appealed to the public consciousness and was likely the "biggest lever in the gunmen's power play."[33] He also points out that rescued hostages reported that the attackers had originally planned on

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[30] Sandra Feldman, "Survival Lessons," *National Journal* 33, no. 41 (October 2001): 3139.

[31] Ibid.

[32] Don Philpott, "Protecting the Nation's Schools: Dealing with the Threat of Violence and Terrorism," *Homeland Defense Journal* (August 2005): 14-18.

[33] Nabi Abdullev, "Beslan, Russia: Terror in the Schoolhouse" *Homeland Defense Journal* 2, no. 8 (September 2004): 28-35.

seizing a nearby orphanage, but there were only 150 children, so they decided instead upon the school with more than 1,000 children.[34] Ronald Stephens, executive director of the National School Safety Center, which was established by the U.S. Departments of Education and Justice, stated "No greater challenge exists today than creating safe schools or restoring schools to tranquil and safe places of learning; the challenge requires a major strategic commitment and involves placing school safety at the top of the educational agenda."[35] Philpott also recognizes the need for controlling school access and emphasizes the criticality of establishing a close working partnership with emergency responders and to know the extent of services offered.[36] He also argues that comprehensive training of school personnel and maintaining provisions such as food, water, alternative power sources, and medical and first aid supplies are vital to self-sustainment during an emergency.[37]

Perkins echoes and builds upon Philpott's sentiments, arguing that complacency is the number one threat that schools face and quotes the "it will never happen here" mantra so often heard prior to 9/11. He concurs with the previous literature with respect to involving local first responders, but also asserts that emergency plans must be exercised and that crisis plans cannot be static; they must be fluid and reassessed based on current extenuating circumstances.[38]

Bannan discusses the attractiveness of colleges and universities as potential terrorist targets. She aptly points out that many universities do research with controversial issues such as stem cell research and weapons of mass destruction. She also highlights other unique attributes of college campuses such as the size, diversity of students and the transient nature of the population. Funding is also a critical issue with protecting campuses. Ready Campus, a joint program of Pennsylvania's colleges and universities to provide emergency preparedness resources, saw its funding from the

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[34] Abdullev, "Beslan, Russia," 32.

[35] Ibid.

[36] Ibid., 16.

[37] Ibid., 18.

[38] Jimmie Perkins, "School Security: How Will You Know You Are Ready?" *Homeland Defense Journal* 4, no. 10 (2006): 62.

Department of Homeland Security end on June 30, 2006, even though there had been substantial interest in expanding the program to other states.[39]

Dr. Robert Gillio, founder of Innerlink, an innovative developer of safety and health technology solutions for schools, warns that,

> A generic school response plan can almost be as worthless as no plan at all. It is necessary to create a plan specifically designed for your school-one that takes into consideration the unique needs and threats of each and every school's environment."[40]

Dr. Gillio also argues that "Administrators absolutely must design their crisis response plan with input from local law enforcement, first responders, parents, community members, and any other local stakeholders who will be affected should a crisis occur."[41]

As evidenced in other sub-literature categories, technology is increasingly becoming a solution to many security concerns involving schools. The Spring Independent School District, in suburban Houston is currently using radio frequency identifier tags to track its 16,000 students as they board the school bus, enter and leave the school building. Nearly 1,000 cameras monitor them every day. Additionally, visitors must have their driver's licenses scanned and identity compared to a database before they are permitted entry into the building.[42] Conversely, Kenneth Trump, the President of National School and Safety Security Services of Cleveland, stated "You can have a million dollars of security equipment, but if you don't have the human awareness of how to deal with a bomb, or campus visitor procedures, it's useless."[43] He also

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[39] Anne Louise Bannon, "Big Plan On Campus," *Homeland Protection Professional* 5, no. 8 (September 2006): 34-38.

[40] Perkins, "School Security," 62.

[41] Ibid.

[42] Greg Toppo, "High-Tech School Security is on the Rise," *USA Today* (October 10, 2006),1. http://www.usatoday.com/news/education/2006-10-09-school-security_x.htm (Accessed January 15, 2007).

[43] Claire Luna, "The Region; Plan For Crises, Educators Told," *Los Angeles Times* (April 14, 2003), 1. http://proquest.umi.com (Accessed January 15, 2007).

recommends sharing blueprints of school buildings to local public safety agencies and allowing them to train on campus on weekends so they can become more familiar with the layout.[44]

5. Textbooks

Only two books were located that are specific to the topic of schools and terrorism, *Innocent Targets: When Terrorism Comes to School* by Michael Dorn and Chris Dorn, and *Terror at Beslan: A Russian Tragedy with Lessons for America's Schools* by John Giduck. *Innocent Targets* critically examines the subject of terror attacks on schools starting in the late 1960s including the massacre in Ma'a lot through the Beslan tragedy.

Michael Dorn is considered one of the few experts in the United States with experience in government departments tasked with focusing on both school safety and terrorism. The authors explore some of the reasons that terrorists have attacked schools and make recommendations that schools and their community partners can implement to more effectively prepare for, respond to and recover from acts of terrorism.[45]

Terror at Beslan is the definitive study on the Beslan tragedy. John Giduck has both a military and academic background, with a Master's degree in Russian Studies and International Affairs from the University of Colorado. Giduck traveled to Beslan days after the attack and conducted in depth (albeit anonymous) interviews of several Russian Special Forces, or Spetsnaz, forces that stormed the school and neutralized the terrorists. *Terror at Beslan* critically examines the rescue operations at the school, exposes what went wrong and what could have done better. This introspective analysis culminates in comprehensive recommendations that can and should be employed in the United States to better protect our schools and our children. John Giduck also explores the current threat to schools in the United States.

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[44] Claire Luna, "The Region; Plan For Crises, Educators Told," *Los Angeles Times* (April 14, 2003), 1. http://proquest.umi.com (Accessed January 15, 2007). 2.

[45] Michael Dorn and Chris Dorn, *Innocent Targets: When Terrorism Comes to School* (Macon, GA: Safe Havens International, 2005), 140.

6. Studies and Reports

There are five comprehensive reports germane to this topic. Four of the reports are directly related to school preparedness for terrorist attacks. The America Prepared Campaign studied the specific terrorism preparedness in America's twenty largest school districts. The introduction of the report lays the framework via its statement:

> Terrorism preparedness in schools has much less to do with citizens voluntarily taking responsibility for themselves and their children than it has to do with the government- in this case, our local government and their school systems- doing its job. During the day, governments- accountable public officials- are responsible for the safety of our children. Their work is not voluntary.[46]

While the study itself was successful, some of the results were very disturbing. The study measured the performance of the school districts using the Department of Education's *Practical Information on Crisis Planning: A Guide for Schools and Communities*.[47] This guide recommends the steps that all school districts should take to ensure that they are prepared for many different crises including terrorism. The best-prepared school district in the country was the Fairfax County Public Schools. This district has a comprehensive emergency management plan that deals directly with terrorist attacks. It is likely that the proximity of the school district to the National Capital Region lends itself to this success.

On the other end of the spectrum is the Chicago Public Schools (CPS), which received a failing grade. Andres Durbak, the CPS Director of Safety and Security estimates that 25 to 50 percent of the city's schools do not have satisfactory emergency plans, much less practice them.[48] Many of the CPS schools do not have the basic emergency supplies that the city's own website urges families to have at home in a "ready kit" despite the fact that the district's schools are home for over 400,000 children.

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[46] Phinney, *Preparedness in America's Schools*, 4.

[47] US, DOE, *Practical Information on Crisis Planning*, 1-9.

[48] Phinney, *Preparedness in America's Schools*, 5.

In fact, the U.S. Department of Education reports that nearly 60 million children, 20 percent of the U.S. population, attend the nation's 119,000+ schools.[49]

Unfortunately, poor planning for terrorist attacks is germane not only to the Chicago Public Schools, but nationwide. Despite some advancement, there is an alarming consensus that school emergency preparedness and readiness varies widely. A 2005 national survey of School Resource Officers (SRO) illustrated the following: 92 percent of SRO's believe that schools are "soft targets" for potential terrorist attacks, 74 percent of SRO's believe that their schools are inadequately prepared to respond to a terrorist attack, half said that emergency plans for their schools are not adequate, and 66 percent of SRO's indicated that their emergency plans are not practiced on a regular or ongoing basis.[50]

The document, *School Safety in the 21st Century: Adapting to New Security Challenges Post 9/11* focuses on operational strategy and tactics. An "all hazards" approach is utilized. The document asserts that preparedness planning, training, and collaboration between schools (staff, faculty, students, parents), public safety agencies (police, fire, and emergency medical), and government emergency management authorities can mitigate the impact of emergencies, improve response, and accelerate recovery. The document closely evaluates school accountability, emergency plans, crisis management teams, the role of the parent, safety assessments and exercises.[51]

7. Intelligence Reports

Although not abundant in availability, there are unclassified For Official Use Only (FOUO) intelligence reports on this topic. In the Department of Justice United States Attorney's Office, Northern District of Indiana Anti-Terrorism Advisory Council newsletter, the Federal Bureau of Investigations (FBI) reported that a computer disk

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[49] US Secret Service and DOE, *The Final Report and Findings of the Safe School Initiative*, 7.

[50] National School Safety Center, *NCSS Review of School Safety Research*, 4.

[51] *School Safety in the 21st Century: Adapting to New Security Challenges Post-9/11*, Report of the Conference 'Schools: Prudent Preparation for a Catastrophic Terrorism Incident', October 30-31, 2003, the George Washington University, Washington, DC (Chicago, IL: National Strategy Forum, 2004), 4. http://www.nihap.org/pdf/school_safety_post_911.pdf (Accessed May 15, 2007).

found in Iraq included diagrams and photographs of American schools in six states including two in New Jersey.[52] There is probably a plethora of similar information available via classified documents, but the author does not have a security clearance, and subsequently has no access to this information.

8. Commercial Information

There are also commercial agencies that offer planning and preparedness programs and implementation strategies. The Rapid Responder Crisis Management System© has been awarded the Department of Homeland Security's Safety Act Certification Award and the Focus on Innovation Award from the National Homeland Defense Foundation. Rapid Responder is a crisis management planning system developed by Prepared Response®, headquartered in Seattle, Washington. This system allows facility personnel, police and fire units access to hundreds of site-specific data points, including pre-established tactical plans, floor plans, satellite images, interior and exterior photos, staging areas, hazardous materials locations, utility shut-offs, and evacuation routes for virtually any facility. During a 2003 event at a high school in Spokane, Washington, this system facilitated local emergency responders in containing an armed student within 12 minutes. Within 20 minutes, more than 2,000 students were safely and efficiently evacuated. A system such as this can also serve as prevention through deterring terrorists looking for an "easy mark." This innovative system is currently being installed in 1,275 middle and elementary schools in the states of Washington, Arizona, California, Missouri, Idaho, North and South Carolina.[53]

Jane's published the *Jane's School Safety Handbook* which provides guidelines for crisis planning, warning signs, crisis response guidelines and crisis recovery. The guide also contains helpful reference information such as sample public information release letters and case studies. Although the guide is a small, spiral bound, tabbed "easy

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[52] Department of Justice, United States Attorney's Office, *Antiterrorism Advisory Council Newsletter* 10, no. 02 (October 13, 2004): 3. http://www.iwar.org.uk/news-archive/anti-terrorism-advisory-council/atac-vol-10-02.pdf (Accessed January 8, 2008).

[53] Prepared Response, Inc. "Rapid Responder Crisis Management System Helps Officials Avert School Tragedy," http://www.preparedresponse.com/ (Accessed November 20, 2006).

reference" manual, and not a comprehensive research document, it is nonetheless a helpful guide for school administrators to use as a reference guide.

9. Conference Materials

The author attended the Illinois State Board of Education sponsored *2007 School Safety Conference* in Mount Prospect, Illinois on November 8, 2007. Speakers included Ron Ellis from the Illinois State Police, Ryan Moore from the United States Secret Service, Judith Coughenour from the Federal Bureau of Investigations, Martha Meegen, the Director of Campus Safety and Security at Columbia College, and Larry Drish from the Cook County Bomb Squad. All of the speakers strongly articulated the current threat of terrorist attacks at educational facilities. An abundance of helpful resources and material was distributed to assist schools in establishing emergency preparedness plans and hardening their physical facilities.

The author also acquired materials from the *NYPD Shield School Security Conference* held in New York on September 19th, 2007. The materials indicate that schools are a very soft target and include examples of recent suspicious activities leading authorities to believe that schools are being targeted. These activities include a discussion of training films of school takedowns in terrorist training camps in Afghanistan and the discovery of school floor plans on a laptop confiscated from a known Al Qaeda operative. The conference materials also include examples of threats and possible responses as well as important information on how to manage schools under the threat of terrorism.

10. Conclusion

The available literature, regardless of type or category listed above, seems to agree on several points.

1. Schools are attractive targets for terrorists for several compelling reasons.
2. Children are especially vulnerable to acts of terrorism and require strong guardianship.

3. Schools are largely considered "*in loco parentis*," hence school officials have a special responsibility for the students' care.
4. There is a wealth of available crisis planning materials and training available specific to schools.
5. There is new technology available and information on intelligent building design to better protect school facilities from unauthorized entry and attacks.
6. Schools need to actively engage state and local public safety agencies in the planning process of developing crisis plans.
7. Crisis plans must be exercised with local public safety agencies and should be re-evaluated as necessary.
8. Schools need to provide adequate supplies (i.e., food, water, medical supplies) to sustain a facility during a protracted incident.
9. Financial resources are limited and schools need funding to adopt and implement necessary emergency planning initiatives.

Conversely, the literature also seems to agree that schools are not taking advantage of these opportunities and are not actively engaging state and local public safety agencies in the planning process. They are not providing adequate training to their employees in areas such as basic first aid, cardiopulmonary resuscitation, and specific actions of what to do during an emergency. Additionally they are not providing adequate emergency supplies (medical supplies, food, water, etc) in their facilities to sustain staff and students in the event of a major incident. The literature does not provide an explanation as to why this is occurring.

F. CHAPTER SUMMARY

This chapter set forth the problem statement, research questions, research methodology, significance of research, and a literature review. The answers to the research questions based on the literature review are as follows:

1. Which acts of terrorism have been perpetrated on schools in the U.S. and abroad?

The literature clearly delineates the acts of terrorism that have occurred in or in close proximity to schools in the United States as well as abroad. This is expanded on in greater detail in Chapter II, Section B.

2. What makes children/schools an attractive target for terrorists?

Children are uniquely vulnerable to attacks as they are physically underdeveloped, passive and controllable. Children and schools are also an attractive target from a psychological perspective. Modern day media coverage would exacerbate and compound the overall psychological effect.

3. Which types of attacks are possible or probable?

A plethora of various attacks are possible. It is most likely that conventional weapons would be used in an attack based on many factors further described in Chapter II, Section E.

4. Which types of security measures are available to protect schools?

There are many different security measures that can be put into place to improve and enhance the safety and security of students and staff. These are discussed in detail in Chapter II- Prevention and Deterrence.

5. Which measures can be put into place in urban-area schools to prevent, protect against, and minimize the effects of terrorist attacks that do occur?

There are many different security measures that can be put into place to improve and enhance the safety and security of students and staff. These are discussed in detail in Chapter II- Prevention and Deterrence.

6. Can these measures be used as a model locally, regionally or at the national level?

These measures can be used in any school, but must be developed in concert with local response agencies and regularly trained on and evaluated to be effective.

The first step in protecting schools is to analyze and understand the threat. The next chapter does this in detail.

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II. THREAT ANALYSIS

A. WHY ATTACK A SCHOOL?

The most obvious element of terrorism is the element of intent. The primary purpose of terrorism is the widespread infliction of psychological pain.[54] Terrorism is intended to provoke collective fear and uncertainty. This fear can spread quickly and is not limited to those directly involved in an attack. Many others are affected, including family members and those viewing the event through media broadcast images. Psychological suffering is more prevalent than physical injuries resulting from a terrorist attack.[55] Rachel Yehuda and Steven E. Hyman state that the ultimate goal of terrorists is psychological: to create a climate of fear, uncertainty and vulnerability. They argue that the psychological effects of terrorism are central to the political goals of the perpetrators.[56] Terrorism will not only increase in the coming years, but become more deadly.[57] Douglas Paton and John M. Violanti purport that the United States sees itself as challenged and the assumptions that had previously enabled it to function normally can no longer be relied on as guides for behavior. Americans must explore "a new way of being."[58] Yehuda, et al state:

> Terrorism is not only about life threat to individuals or even a small group of people but is also designed to instill fear in society at large. Terrorism can threaten the sense and safety of security of everyone in the society attacked because they are aware that terrorists may strike again in *unpredictable* locations.

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[54] Adrienne Butler, Allison Panzer and Lewis Goldfrank, *Preparing for the Psychological Consequences of Terrorism* (Washington, DC: National Academy of Sciences, 2003), 99.

[55] Ibid., 34.

[56] Rachel Yehuda and Steven E. Hyman, "The Impact of Terrorism on Brain, and Behavior: What We Know and What We Need to Know," *Neuropsychopharmacology* 30, no. 10 (October 2005): 1778.

[57] Douglas Paton and John M. Violanti, "Terrorism Stress Risk Assessment and Management," in *Psychology of Terrorism*, ed. Bruce Bongar, Lisa Brown, Larry Beutler, James Breckenridge and Philip Zimbardo (New York: Oxford Press, 2007), 241.

[58] Ibid., 228.

The attacks on 9/11 killed 3,063 people. Although there were multiple attacks, the same method was used. Susan Brandon and Andrew Silke assert that for a subsequent attack to significantly increase public perceptions of vulnerability, fear, and stress, it will have to be of larger intensity of those on 9/11 or a series of small attacks, such as the bombing of a shopping mall, hospital, or *school*. They argue that this could be as or more effective than a single large-scale attack. Most schools have little to no protection and are therefore an attractive target as they are a point where people are most vulnerable and represent a target of opportunity.[59]

Mark Brandenburg and James Regens state that the risk that children might be targeted by terrorists is evidenced by the fact that children who have been placed in danger, injured or killed create an enormous emotional impact on the community and in the media.[60] Butler, et al claim that terrorist attacks and the threat of a terrorism event can result in more severe psychological consequences than other types of traumatic events due to a perceived lack of control. People are more likely to feel that an activity or event is not dangerous if they can control it.[61] A large percentage of families in the United States sustain themselves financially through dual incomes via both spouses working part or full time jobs. Of these families, many have one or more children in the educational system at varying levels and depend on schools to be day care providers, or "in loco parentis".

It is likely that a large-scale coordinated attack in schools in multiple locations would cause many families to take their children out of school and employ home schooling or other alternatives to traditional classroom methods due to a perceived lack of control. While removing children from the activity or event (school in this case) would control their exposure to the danger, this would also result in the loss of school as a "day care" provider and would require one of the parents to remain home as a full time

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[59] Unknown Author, "Consequences," online book NS 4133 *Psychology of Fear Management and Terrorism* https://www.chds.us/courses/mod/book/view.php?id=22985 (Accessed October 25, 2007).

[60] Brandenburg and Regens, "Terrorist Attacks against Children," 1.

[61] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 45.

caregiver. The resulting disruption would have a direct impact on society as a whole vis-à-vis a significant reduction in the workforce and subsequent tremendous impact on the overall economy.

School officials in Oklahoma City reported a 25 percent decrease in attendance in the weeks following the 1995 bombing of the Murrah Federal building. Students and parents were concerned about safety and wanted assurances of improved protective measures. Teachers and school administrators were also concerned about possible attacks and the safety of students and staff. As a result of the serial sniper attacks in Washington D.C. in October 2002, school attendance plummeted to as low as 10 percent in several elementary schools where one of the shootings occurred. This particular incident involved the shooting of a child walking from a car into a school. Similarly, the choice of thousands of people not to utilize air travel after 9/11 allowed a measure of personal control, but had devastating effects on the economy. Paradoxically, this action also caused a significant increase in traffic fatalities as more people opted to drive to their destinations.

B. HISTORY OF SCHOOL ATTACKS

Department of Homeland Security Secretary Michael Chertoff, while speaking at a *Securing the Schools Initiative* event on October 30, 2007, stated that during the 16-year period from January 1990 to September 2006, there were 949 incidents of deliberate attacks on educational systems worldwide outside of the United States. He further stated that these incidents resulted in 813 deaths and 2,257 injuries.[62]

The trend graph developed by the Memorial Institute for the Prevention of Terrorism graphically illustrates terrorist attacks against educational institutions from 1998-2006.[63]

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[62] Michael Chertoff, "Remarks by Homeland Security Secretary Michael Chertoff at a Securing the Schools Initiative Event" (Alexandria, VA: October 30, 2007). http://www.dhs.gov/xnews/speeches/sp_1193784484405.shtm (Accessed January 11, 2008).

[63] Roger Webb, "College Campuses are Vulnerable to Terrorism" *MIPT Insight* (May 2007): 4. http://www.terrorisminfo.mipt.org/pdf/College-Campuses-Vulnerable-Terrorism.pdf (Accessed January 2, 2008).

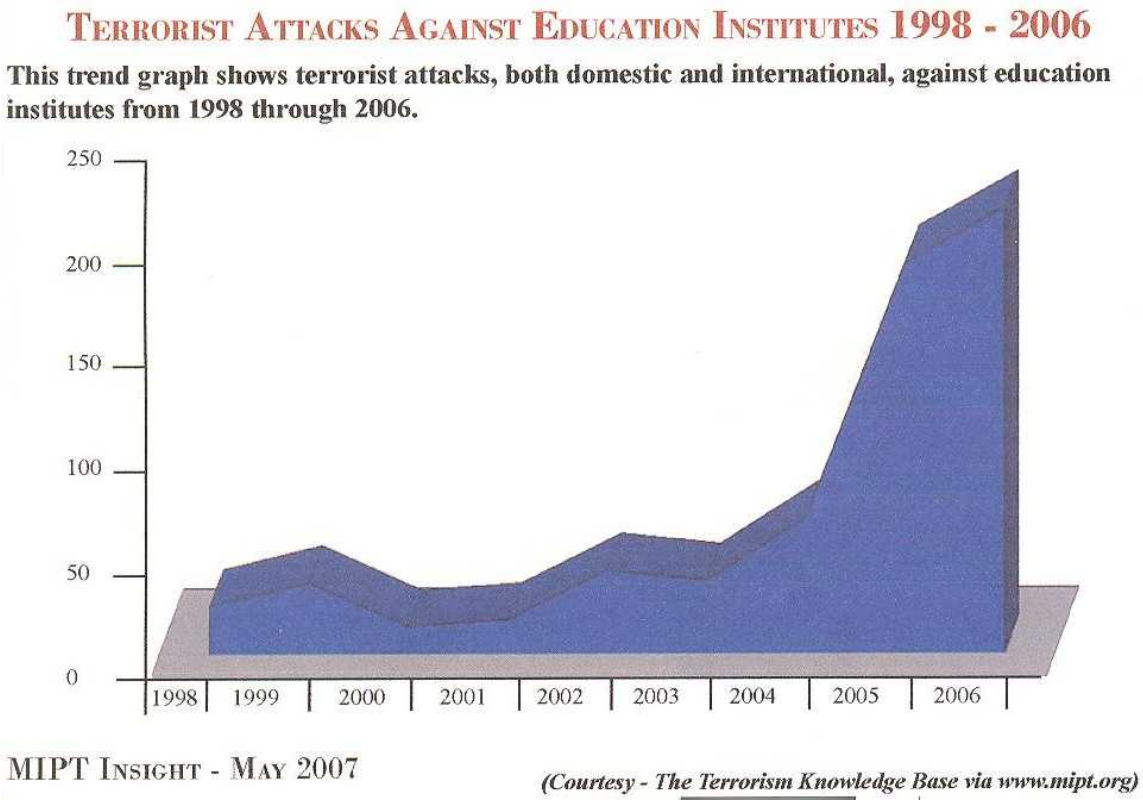

Figure 1. MIPT History of Terrorist Attacks Illustration

Brandenberg and Regens argue that that events such as the Murrah Federal Building bombing on April 19, 1995, clearly demonstrates that terrorists are willing and able to specifically seek out and attack large numbers of children as the attackers were well aware that the building house a children's day care facility. Of 168 total deaths, 17 were children.[64]

C. CURRENT THREAT INDICATORS

Department of Homeland Security Secretary Michael Chertoff, while speaking at a *Securing the Schools Initiative* event on October 30, 2007, noted that when we consider the issue of school safety, we live in a world where — both overseas and domestically — we have to be concerned about the possibility of people carrying out acts of violence in

64 Brandenburg and Regens, "Terrorist Attacks against Children," 1.

our schools, including those driven by terrorist motivations.[65] Former FBI Special Agent Don Clark led the investigation into the first World Trade Center attack. He argues that law enforcement and political leaders cannot leave it up to others to make sure that we are ready and emphasizes that refusing to believe that schools are a terrorist target does not make it so.[66]

Brad Thor, a member of the government's analytic "red cell" unit formed after 9/11 believes that terrorists are currently targeting soft targets such as schools. Thor theorizes that an attack will come in the form of a coordinated attack across the country in multiple locations.[67] The Department of Justice Anti-Terrorism Advisory Council issued a newsletter on October 13, 2004, that warned U.S. schools to be on alert after a computer disk was found in an insurgent safe house Iraq that included diagrams and photographs of American schools. The disk had photographs of schools in six states, including two in New Jersey.[68] Other events demonstrating the threat to schools include:

1. Spokesman Suleiman Abu Gheith's declaration of al-Qaeda's right to kill two million American children.

2. An Iraqi national with known terrorist connections caught with a computer disk detailing Department of Education security measures and crisis planning for U.S. school districts.

3. A March 16, 2007 FBI Intelligence Bulletin No. 245 warning of an unusual increase in the number of foreign nationals seeking school bus driver positions that have had connections with known terrorist groups.

4. In 2006, two Saudi men wearing trench coats despite the summer heat, boarded a school bus in Tampa, Florida. They spoke in Arabic and

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[65] "Remarks by Homeland Security Secretary Michael Chertoff at a Securing the Schools Initiative Event."

[66] Rick Armellino, "Schools Invaders Don't Take Hostages," *PoliceOne.com* (November 5, 2007) http://www.policeone.com/pc_print.asp?vid+1355243. (Accessed November 9, 2007).

[67] Glenn Beck, "Brad Thor on What Could be Coming Next," *Glennbeck.com* (September 11, 2007) http://www.glennbeck.com/news/09112007a.shtml. (Accessed November 7, 2007).

[68] DOJ, *Antiterrorism Advisory Council Newsletter*, 3.

remained for the entire ride to the school. Some security consultants believe that they were testing the possibility of how easy it would be to attack a school bus in the United States.[69]

5. In the few months of early 2007, seventeen full-sized yellow school buses were reported stolen from charter schools, businesses schools and private bus companies in Houston, Texas. Additionally, in 2005, more than 2,000 school bus radios were stolen in California.[70]

6. A videotape found in an al-Qaeda training camp in Pakistan where they trained for a school attack with multiple role players in a mock American school.[71]

7. Osama bin Laden's statement that the 2004 terrorist attack at Beslan will happen many times over in the United States.[72]

D. UNDERSTANDING THE ATTACKERS—THE MIND OF A TERRORIST

Is a human being capable of purposefully targeting and killing children vis-à-vis a terrorist attack on a school? Clearly, the answer is yes, as evidenced by the attacks in Ma'a-lot and Beslan. But what makes a person capable of committing such a heinous act, and perhaps more importantly, why? To better protect schools and our children, it is imperative that we fully comprehend the nature of the emerging threat we face. Jeff Victoroff asserts that the fast-evolving trends of globalization, religious fundamentalism and privatization of weapons of mass destruction together constitute a clear and present danger to the security of civilization.[73] Victoroff also argues that political psychology theory advises that the better a target group understands the terrorist mindset, the better

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[69] Ed Piper, "The Clear and Present Danger to Our Schools and Colleges" *Americanchronicle.com* (July 2, 2007) http://www.americanchronicle.com/articles/viewArticle.asp?articleID=31118 (Accessed August 28, 2007).

[70] Marc Sheppard, "Al Qaeda Targets Our Schoolchildren," *Theconservativevoice.com*, 1. (October 1, 2007) http://www.theconservativevoice.com/article/28312.html (Accessed October 17, 2007).

[71] Beck, "Brad Thor on What Could be Coming Next."

[72] Sheppard, "Al Qaeda Targets Our Schoolchildren," 1.

[73] Jeff Victoroff, "The Mind of the Terrorist: A Review and Critique of Psychological Approaches," *Journal of Conflict Resolution* 49, no. 1 (February 2005): 3.

that group may develop policies to manage the risk.[74] An embryonic, but burgeoning body of research by psychologists offers an insight into the threat and the mind of the terrorist.

Contrary to popular belief, terrorists are not crazed psychopaths. Eerily enough, many of them are perfectly normal functioning members of society. Victoroff cites several empirical psychological studies that suggest that terrorists do not usually exhibit psychiatric disorders.[75] Phil Zimbardo purports that we are not born with tendencies towards good or evil but with mental templates to do *either.*[76] Arie Kruglanski and Shire Fishman agree that terrorists do not seem to be characterized by a unique set of psychological traits or pathologies. In fact, they state the following regarding a study:

> The terrorists did not differ from the comparison group of non-terrorists in any way; in particular, the terrorists did not show higher rates of any kind of psychopathology…..indeed terrorism would be a trivial problem if only those with some kind of psychopathology could be terrorists. Rather we have to face the fact that normal people can be terrorists.[77]

So then, if terrorists can be psychologically "normal", how are they able to commit such heinous acts? Zimbardo claims that few people will engage in an "end game" final solution without first being prepared psychologically to do the "unthinkable." He references Bandura's model which outlines how it is possible to morally disengage from destructive conduct by altering perceptions of reprehensible conduct, minimizing the consequences, displacing responsibility, and most significantly, by dehumanizing the victim.[78] Thus, cognitive conditioning can be effectively used to dehumanize the enemy in the attacker's eyes. Indeed, mental conditioning is a soldier's most potent weapon, for without it, it is unlikely he could kill another person.

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[74] Victoroff, "The Mind of the Terrorist: A Review and Critique of Psychological Approaches," ,4.

[75] Ibid., 12.

[76] Phil Zimbardo, "A Situationist Perspective on the Psychology of Evil," in *The Social Psychology of Good and Evil*, ed. A. Miller (New York: Guilford, 2004), 26.

[77] Arie Kruglanski and Shira Fishman, "The Psychology of Terrorism: Syndrome Versus Tool Perspectives," *Terrorism and Political Violence* 18, no. 2 (July 2006): 195.

[78] Zimbardo, "A Situationist Perspective on the Psychology of Evil," 31.

An experiment by Bandura, Underwood and Fromson in 1975, revealed that college students would shock other college students that were dehumanized by being labeled "animals" more frequently than the control group. For Islamic radicals, "animals" is synonymous with "infidels." Either term effectively dehumanizes the intended victim. Zimbardo discusses the "invention of an evil enemy" that is portrayed as "aggressive, faceless, a rapist, godless, barbarian, a dehumanized animal, etc.[79] This portrayal dehumanizes the intended victim and desensitizes the attacker. History is replete with examples of this tactic such as during the Holocaust. This conditioning process can be started very early as evidenced by the indoctrination of German children in the 1930s and 1940s to hate Jews. Zimbardo argues that evil was spread through a perverted educational system that turned away from critical thinking that would open student's minds to new ideas and toward thinking about those targeted as the enemy of the people.[80] A correlation can be drawn between these schools of seventy years ago to the religious Madrassa schools spreading throughout the world today. Many of the Maddrassas also preach hatred of Jews.

Zimbardo questions if terrorists are programmed to carry out their deplorable deeds by means of some identifiable and replicable training practice.[81] Unfortunately, in the case of Al Qaeda, the answer is yes. Terrorist groups such as Al Qaeda use conditioning tactics to mentally prepare their attackers to kill children. A recently released video clip obtained from a terrorist training camp in Afghanistan shows terrorists training for a school takeover operation. Among other things, you can hear the loud sound of a baby crying in the background. Sources state that these sounds were piped into the building to create the same chaotic atmosphere that there would be in a school siege situation.[82] This video represents a replicable training practice designed to tactically and psychologically prepare terrorists for an attack on a school.

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[79] Zimbardo, "A Situationist Perspective on the Psychology of Evil,"34.

[80] Ibid., 37.

[81] Ibid., 44.

[82] Glenn Beck, "Exposed, The Perfect Day," http://www.glennbeck.com/news/09142007b.shtml (Accessed October 18, 2007).

It has been established that people are indeed capable of attacking a school and killing children. The issue of how they psychologically prepare themselves to do so has also been addressed. Perhaps the most salient unanswered question is "what motivates them to commit such despicable and deplorable acts?" Again, psychological research may hold the key to this question. The easy answer is that radical Muslims hate the West. The more complex answer lies in the religious underpinnings of Islam, or more appropriately, the perversion of Islamic faith through radicalization. Suicide bombers epitomize the deep seated commitment of radical fundamentalists. Americans dismiss suicide bombers as senseless fanatics, but they view themselves as martyrs for a cause. Their supporters also view them the same way and honor them as heroes. There have been more than ninety-five suicide bombings against Israelis since September of 2000. The bombers have historically been young men, but now women have joined the ranks.[83] Indeed, two of the attackers at Beslan were female Chechen Black Widow suicide bombers.

Zimbardo aptly points out that suicide bomber recruits believe that they will earn a place beside Allah and their relatives will also be entitled to a high place in heaven because of their martyrdom. Moreover, a sizable financial incentive is bestowed on their family as a gift for their sacrifice. For the young males, there is an additional incentive of being bestowed scores of virgins in the next life. This program of indoctrination encourages individuals to become living martyrs.[84] The Arab press emphasizes "if martyrs had nothing to lose, sacrifice would be senseless. He who commits suicide kills himself for his own benefit; he who commits martyrdom sacrifices himself for the sake of his religion and nation- the Mujahed is full of hope."[85] It is important to point out that the willingness to attack schools is not limited to Muslim radicals eager to commit martyrdom as the attack in Ma'a lot involved Palestinian Marxists and not radical Islamists.[86]

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[83] Zimbardo, "A Situationist Perspective on the Psychology of Evil," 45.

[84] Ibid, 46.

[85] Unknown, "Terrorists and Terrorism."

[86] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, February 5, 2008.

E. TYPES OF POTENTIAL ATTACKS

Terrorists may elect to employ any number of methods of attack. Typically, they look for a high "return on investment"- meaning that they hope to kill as many people as possible and create a tremendous amount of fear with minimal investments in both funding and time commitments. The larger the amount of funding required, the greater chance of the plot being discovered by authorities investigating various funding mechanisms. Likewise, the longer the amount of planning, the greater the chance of the planned attack, or components thereof being discovered. While a myriad of different attack scenarios exist, an attack may come in six basic forms such as chemical, biological, radiological, nuclear, explosive or as conventional as weaponry such as firearms.

A chemical attack could easily be achieved using readily available materials such as chlorine gas, either from a stolen chlorine gas compressed cylinder truck, a detonation of a railway cylinder adjacent to a building, or even from the school's own chlorine storage for pool maintenance. A variety of chemical agents could be easily be introduced into the school's HVAC system from an outside intake. Depending on the agent used, a chemical attack such as this would be undetectable and the results almost immediate. Not knowing where the agent was emanating from would also render the school useless in stopping it. Different types of chemical agents include biotoxins, blister agents, vesicants, blood agents, choking agents and nerve agents.

A biological agent could be undetectably dispersed in the same fashion, but the results and long term effect may not be evident for hours, if not days, depending on the agent used. Effective dispersal of biological agents can be difficult and depends on several different variables, many of which cannot be independently managed. While many biological agents are difficult to obtain, many can be easily manufactured, such as Ricin from the waste of processing Castor beans. It can be used in the form of a powder, a mist, or can be dissolved in water. Ricin can be inhaled, such as if it was aerosolized and introduced into the building's HVAC system. Ricin can also be ingested through deliberate contamination of a school's drinking water supply or food served in the

cafeteria. A dose as little as 500 micrograms (about the size of the head of a pin) is enough to kill an adult. Center for Disease Control reports have indicated that Ricin was used in the Iran-Iraq war in the 1980's and has been found in al Qaeda caves in Afghanistan. Anthrax is a less lethal, but extremely dangerous agent that can be purposefully distributed with devastating effects. In 2001, Anthrax was purposefully spread through the U.S. postal system, causing twenty-two cases of Anthrax infection. Anthrax can be transmitted through the skin (cutaneous absorption), the lungs (inhalation), and digestively (ingestion). Other less lethal agents could also be used to contaminate food and water supply such as Botulism or different strains of Salmonella.

Radiological attacks are also possible. Radiological dispersal devices (RDD's), also known as "dirty bombs" can be crudely manufactured using radioactive materials acquired from a hospital or medical laboratory or even from a large quantity of smoke detectors and combined with conventional explosives. Most RDD's would not release enough radiation to injure or kill many people, but would create massive fear and panic. It would also contaminate the affected area with radiation, rendering it unusable until a costly cleanup can be achieved. A nuclear attack on a school is highly unlikely, though not out of the realm of possibility. If terrorists acquired a nuclear device, the size of the area affected would be so great that specifically targeting a school building or campus is unnecessary. While still improbable, it is more likely that terrorists would target a nuclear reactor, attempting to cause a release of radiological material into the surrounding area.

The most likely attack to occur on a school may be one that utilizes conventional weaponry such as firearms and possibly explosive devices. This conclusion is based on the fact that firearms are easy to obtain and are inexpensive. While military explosive devices are difficult to obtain, improvised explosive devices (IED's) and incendiary devices are relatively simple to manufacture with materials that are readily available. Highly destructive explosive devices can be quickly and effectively manufactured with materials acquired from a local hardware store. Previous attacks also support this conclusion as devices such as these have already been used successfully in school attacks such as those used in the Columbine massacre. Aum Shinrikyo, now known as Aleph,

has tried to use non-traditional attack methods nineteen times and has largely failed, further supporting the fact that non-traditional attack methods are not always easy to carry out, nor are they consistently effective.[87]

More important than the attack mechanism itself is the significance of a systematic, coordinated attack intended to inflict the most harm and foment the greatest amount of panic and hysteria. Certainly, even the most basic type of attack using conventional firearms would be psychologically devastating if coordinated among several schools and widely publicized by the media.

F. CHAPTER SUMMARY

This chapter examined the rationale to attack a school, the history of school attacks, and current threat indicators. Also included was an analysis of the terrorists and their motivation as well as the type of potential attacks that may be utilized. A thorough understanding of the threat provides a framework from which to determine methods to prevent and deter attacks through intelligence gathering, fusion and risk and vulnerability assessments, both of which are covered in the next chapter.

[87] David Brannan (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, February 19, 2008.

III. PREVENTION AND DETERRENCE

A. INTELLIGENCE

Intelligence is probably not the first thing that comes to mind when considering preventing an attack on a school. On the local level, there are various threat indicators that can be indicative of an attack. Terrorists often attempt to gather as much information about a target during the planning phase of the attack. They do this through a variety of different types of surveillance activities, including mobile and static surveillance. School Resource Officers and school staff can provide counter-surveillance and intelligence by watching for things such as:

1. An interest in school security such as access control or barriers.
2. An interest in obtaining school site plans, schedules, special events and bus routes.
3. People exhibiting unusual or suspicious behavior such as note taking, using still photography or performing video surveillance.
4. Observation of school safety drills by unknown people.
5. Asking questions of school personnel or students.
6. Unidentified vehicles parked in the lot.

On the regional, state and national level, fusion centers can and should watch for trends, providing communication between schools and "putting the pieces together." An attack on one or more schools in a narrow time frame is likely indicative of additional coordinated attacks. It is critical to gather as much information as quickly as possible through a variety of means if this occurs. Quickly and effectively gathering, analyzing and disseminating intelligence could mean the difference of thwarting subsequent attacks.

Intelligence available to terrorists should be controlled as much as possible. Schools must restrict critical information such as school emergency plans, site plans, blueprints, and bus routes, yet much of this material can be widely found on the internet. Schools should also perform thorough background checks on school employees including

contractors, substitute teachers, transportation personnel and volunteers. A terrorist group can gather significant intelligence by having "somebody on the inside." As previously highlighted, the March 16, 2007, FBI Intelligence Bulletin No. 245 warned of an unusual increase in the number of foreign nationals seeking school bus driver positions that have had connections with known terrorist groups. Other areas to be closely monitored include food security and delivery and receipt of packages to the school.

School Resource Officers (SROs) are probably the single most important intelligence asset that a school can employ. SROs have formal law enforcement training that includes looking for suspicious activities. Unfortunately, many school districts have not budgeted to include an SRO, and many large school districts employ only one SRO to cover large campuses comprised of multiple buildings situated on several acres. SROs should have a method in place to communicate signs of an imminent attack not only to their local law enforcement agency, but also to the state level to alert analysts in the fusion center. In Israel, school security officers canvass neighborhoods near schools and request that local businesses and residents maintain a watchful eye and report any suspicious behavior. Moreover, each police sub-district has police assigned to school security duty and they conduct roving patrols.[88]

B. RISK AND VULNERABILITY ASSESSMENT

1. Vulnerability of Children

Children have significantly different and greater physical and psychological vulnerabilities to terrorism than adults.[89] Depending on age, children may not be able to physically defend themselves or remove themselves from the threat of imminent danger. Children are more susceptible to chemical or biological attacks as a greater relative body surface area places them at risk for more rapid skin absorption of chemical agents or

[88] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, February 5, 2008.

[89] Brandenburg and Regens, "Terrorist Attacks against Children," 4.

toxins. Children are also at a greater risk of hypothermia due to rapid heat transfer via the greater body surface area.[90] Biological or chemical attacks can have a significant effect upon children as compared to adults as these agents concentrate low to the ground and closer to the level of a child's airway. The skin of young children is also less able to resist chemical agent absorption and is highly susceptible to vesicant exposure.[91] Children also have a greater propensity for injury susceptibility.

Psychologically, children have a significant dependence upon adults for safety, security and emotional needs. As compared to adults, children are helpless and passive, lacking the same level of responsiveness. Obviously, the younger a child, the less likely they are to be able to resist physical violence. A lesser degree of resistance increases the vulnerability of a target. It is this high degree of vulnerability that may attract terrorists to focus on elementary or middle schools as opposed to a high school or university.

2. Physical Infrastructure

A thorough risk and vulnerability assessment should analyze several factors regarding the physical infrastructure of schools, beginning with the location. The physical location of a school can present vulnerabilities. Urban areas schools are usually located in populated areas which lend themselves to having significant amounts of pedestrian and vehicular traffic. Generally speaking, it is easier for terrorists to "hide in plain sight" in crowded areas to perform surveillance, plan and execute an operation. Both vehicles and people in large numbers allow attackers to blend in. Large campuses are widely accessible and offer easy places to hide and blend in with students and teachers. Many large campuses also have large stadiums and arenas which attract large crowds. Conversely, a school in a remote area presents challenges for terrorists as strangers would appear out of place and therefore draw attention to themselves. A lack of regular vehicular traffic would also draw attention to vehicles such as rental trucks that

[90] Brandenburg and Regens, "Terrorist Attacks against Children."

[91] Ibid., 11.

do not necessarily belong on school property. The aforementioned circumstances lend themselves to be good candidates to be protected by fences, controlled access points and surveillance cameras.

The location of a school can also lend itself to the exploitation of man made technological hazards. A school's proximity to transportation corridors such as major highways or railways can provide an opportunity for terrorists to use a chemical attack by purposefully damaging a vessel containing hazardous materials such as a chlorine truck or rail tanker near a school. Likewise, a chemical plant or building storing hazardous materials in close proximity to a school can be attacked with conventional explosives, thereby causing a cascading destructive effect with the subsequent release of hazardous materials into the general area. Local planners and developers should take these issues into account when building new school facilities and when issuing land use permits for areas within close proximity to schools. Schools already situated close to hazards as listed above should incorporate appropriate contingencies into their emergency planning efforts.

The actual physical infrastructure of schools is vulnerable in a myriad of ways. School facilities range from single small buildings, to extremely large multi-story buildings to campuses comprised of both. Obviously, a single small building would be much easier to monitor and protect than large complex campuses. Schools are heavily compartmentalized by design. This compartmentalization results in "buildings within buildings" with a plethora of interconnecting hallways serving as mazes. As a result of modern fire codes, schools can be further compartmentalized by closing large steel fire doors in the main corridors. This compartmentalization in effect creates areas that can be easily controlled by a would be attacker or group of attackers. Many school building diagrams are posted on school websites to allow both students and parents to familiarize themselves with the layout of the building. The terrorists can capitalize on this information to assist in the planning stages of a coordinated attack. The Federal Bureau of Investigations (FBI) reported that a computer disk found in Iraq included diagrams and

photographs of American schools in six states including two in New Jersey.[92] Unfortunately, many public safety agencies do not maintain such plans for quick access to the scene of an emergency incident. In addition to diagrams and floor plans, some schools have inexplicably opted to post their entire emergency plans on the internet. The utility of these plans to terrorists is painfully obvious. Physical security at schools ranges widely. Many schools do not enforce a single point of entry and leave numerous exterior doors unlocked. This allows ingress to the facility from many different points, severely limiting the monitoring of individuals entering the building.

The majority of schools were never designed with the intent to create facilities that are resilient to a terrorist attack. In many cases, windows are accessible from ground level and are not constructed with shatter resistant laminated safety glass. Heating, ventilation and air condition (HVAC) system intakes are unprotected and usually do not have a single point of shutoff. A terrorist could easily release a biological material or chemical agents in sufficient concentration into a single HVAC intake and affect large areas of a building, if not the entire building itself. Due to modern fire codes, schools have numerous exterior exit doors located throughout the building. Schools are designed like a sieve to allow the quick exit of students from numerous points throughout the building. Many schools also contain hazardous materials on the premises in the form of janitorial supplies or chemistry labs. Other building design issues should be analyzed such as lighting, alarm systems, landscaping, and restricted roof access. Focusing on these issues may not prevent a determined attack, but may help in deterrence. A building with adequate exterior lighting and appropriate landscaping (i.e., not overgrown and close to building) makes it much more difficult to perform surveillance and gather information. Other issues to consider involve the actual type of construction of the building. Buildings with truss construction and long roof spans are much more susceptible to complete collapse from a properly placed explosive device.

92 DOJ, *Antiterrorism Advisory Council Newsletter*, 3.

3. Transportation- School Buses

Half a million school buses transport twenty five million children to and from school each day.[93] School buses are extremely vulnerable and have a history of having been targets of terrorist attacks. On May 8, 1970, Palestinian terrorists murdered nine children and three adults by attacking a school bus. Terrorists in Russia, Thailand, Israel, Djibouti and Somalia have also attacked school buses.[94] Michael Dorn states:

> As an extension of the school itself, school buses in our country are a highly symbolic, plentiful and lightly protected target for terrorists who intend to commit a high profile attack with relatively few resources.[95]

In 2006, two Saudi men wearing trench coats boarded a school bus in Tampa, Florida. Some security consultants believe that they were testing the possibility of how easy it would be to attack a school bus in the United States.[96] In the early months of 2007, seventeen full-sized yellow school buses were reported stolen from charter schools, businesses schools and private bus companies in Houston, Texas. Additionally, in 2005, more than 2,000 school bus radios were stolen in California.[97] It is not hyperbole to assert that these events are weak signals of something foreboding to come.

Michael Dorn asserts that school buses are attractive targets for two reasons: transportation is a preferred target of terrorists worldwide, and an attack on a school bus would strike fear and panic into the heart of America. Dorn cites recent congressional testimony that 42 percent of international terrorist incidents have focused on transportation systems as targets and the Federal Bureau of Investigations has stated that 40 percent of international mass transit attacks from 1920 to 2000 used buses as targets.

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[93] Piper, "The Clear and Present Danger."

[94] Dorn and Dorn, *Innocent Targets*, 75.

[95] Ibid., 75.

[96] Piper, "The Clear and Present Danger."

[97] Sheppard, "Al Qaeda Targets Our Schoolchildren."

Moreover, the history of international attacks with schools as targets shows that almost 40 percent of attacks have focused on buses as targets.[98]

Joint FBI-DHS Bulletin #245 (FOUO) dated March 16, 2007, outlines suspicious activities involving school buses. The activities are highlighted as a number of foreign nationals with ties to extremist organizations have been able to purchase school buses and acquire licenses to drive them. Additionally, some school districts have reported an unusual increase in the number of foreign nationals seeking school bus driver applications. Subsequent FBI investigations revealed that many applicants had connections to known terrorist groups.[99] In 2004, the FBI arrested Mohammad Kamel Elzahabi for making false statements to the FBI Joint Terrorism Task Force. Further investigation revealed that Elzahabi has been employed as a school bus driver and had previously served as an instructor at a terrorist training camp in Afghanistan and had connections to al Qaeda.[100]

Buses are extremely vulnerable for several reasons. Buses generally hold large concentrations of people in a relatively small place. This offers a high degree of control for a potential attacker. The concentration of people and the construction features of the bus also make it a deadly vessel in which to use explosives. A small amount of explosives in an enclosed space are as effective or more than large amounts of explosives in a building or open area. When air conditioning or heat is being used and the windows are closed, this further compounds the effect of an explosive blast. Buses are also highly predictable, often taking the same exact route every day. This provides for consistent surveillance and planning for an attack. Buses in the United States offer no protection features such as armor like some do in Israel. In most Israeli urban areas, children utilize regular public transportation, of which only a small number have been equipped with

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[98] Chris Dorn, "School Bus Terrorism: A Practical Analysis." nationalterroralert.com (October 17, 2007) http://www.nationalterroralert.com/school-bus-terrorism-a-practical-analysis/ (Accessed October 17, 2007).

[99] Federal Bureau of Investigation, "Suspicious Activities Involving School Buses," *Intelligence Bulletin* no. 245 (March 16, 2007): 2.

[100] Dorn and Dorn, *Innocent Targets*, 78.

armor and countermeasures. Children in West Bank settlements, however, are usually transported in armored buses and accompanied by an army patrol.[101]

4. Lack of Training and Response Plans

There exists an alarming consensus that school emergency preparedness and readiness varies widely. A 2005 national survey of School Resource Officers (SRO) illustrated the following: 92 percent of SRO's believe that schools are "soft targets" for potential terrorist attacks, 74 percent of SRO's believe that their schools are inadequately prepared to respond to a terrorist attack, half said that emergency plans for their schools are not adequate, and 66 percent of SRO's indicated that their emergency plans are not practiced on a regular or ongoing basis.[102] A May 17, 2007 report by the United States Government Accountability Office (GAO) states that only 32 states have laws or policies requiring school districts to have emergency management plans. An estimated 62 percent of school districts identified challenges related to a lack of equipment, training for staff, and personnel with expertise in emergency planning.[103]

It has been established that school buses are vulnerable targets. It is not only the nature of the vehicle and its utility that make it vulnerable, but the lack of training for the driver as well. Ken Trump of National School Safety and Security Services stated:

> School districts do a great job of training drivers how to drive the bus, but a very poor job at training them on security procedures, recognizing and reporting strangers, what to do in an emergency situation, how to contact the police, what to do when the police show up, what to do if you have somebody pull a gun on the bus, what to do if you have a stranger or parent or irate parent or an unusual person approach the bus, even just simple things.

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[101] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, February 5th, 2008.

[102] National School Safety Center, *NCSS Review of School Safety Research*, 4.

[103] US, GAO, *Emergency Management*, 1.

5. Apathy

Perhaps the single biggest factor in the lack of school security is apathy. A significant portion of the population lives under the shroud of "it can't happen to me" or "it will never happen here." The attacks of 9/11 proved that bad things can and will happen here. It is unfortunate that it often takes tragedy to cause realistic and logical concerns to be taken seriously. History is replete with examples. One such example is the tragic fire at Our Lady of Angels School in Chicago in 1958. "Panic hardware" was widely available, but rarely installed on exit doors in schools at that time. This fire resulted in the unnecessary death of 92 children and three nuns due to inability to exit the building. Will it take a significant tragedy at a school in the United States for parents and administrators to put protection measures into place, or will it be done voluntarily as a pre-emptive initiative?

A great deal of apathy also stems from taxpayer frustration. School district expenses account for the lion's share of many people's property taxes. People do not want to pay more taxes and in many cases vote against referendums necessary to keep schools financially solvent. Hypocritically, many of the same government spending watchdogs will be the first to point fingers and assign blame to school administrators when a tragedy does occur. Moreover, many school administrators do not feel any urgency and assign little priority to school security with respect to available budgets.

C. CHAPTER SUMMARY

This chapter examined the utility of intelligence gathering and fusion and the significance of risk and vulnerability assessments. Once intelligence activities are identified and risk and vulnerability assessments completed, preparedness activities can be contemplated.

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IV. PREPAREDNESS

A. PLANNING

The planning process is the foundation and backbone of homeland security programs and emergency response for schools. School administrators should not develop plans in a vacuum; they should make sure that school emergency plans are developed as a part of a community wide planning process to insure that a diversity of knowledge is instilled into the process and resulting plan. Stakeholders should be identified and included early on in the initial phases of the planning process. Planning is not a static process, but is dynamic and should reflect changes made as a result of input from all stakeholders as well as weaknesses discovered during the evaluation phase.

Nancy Degnan argues that school officials need to work with the idea of partnering with public safety personnel and other stakeholders in the disaster preparedness process.[104] But who exactly are the stakeholders? Michael Dorn and Chris Dorn of Safe Havens International appropriately describe the stakeholder relationship in protecting schools as follows:

> School safety is the business, not only of school officials, but also of law enforcement officers, paramedics, firefighters, emergency management personnel, public health officials, mental health professionals and a host of other local, state and federal experts.[105]

Clearly, all of the agencies that will be involved in the initial emergency response to an incident involving a school are key stakeholders; other agencies that are not a part of the initial response but will play an important role during the recovery phase are vital stakeholders as well.

The emergency response community and the fire department in particular, have a long history of developing, implementing, exercising and evaluating emergency plans.

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[104] Dorn and Dorn, *Innocent Targets*, 84.

[105] Ibid.

Accordingly, the U.S. Department of Education's *Practical Information on Crisis Planning: A Guide for Schools and Communities* contends that "crisis plans should be developed in partnership with other community groups, including law enforcement, fire safety officials, emergency health services, as well as health and mental health professionals."[106] Many planning and response "templates" have burgeoned from the emergency response community, such as the National Incident Management System (NIMS), which was birthed from the California Department of Forestry incident command system utilized to coordinate operations at major forest fires. In short, public safety agencies are particularly well suited to assist schools with developing comprehensive emergency response plans.

Dr. Robert Gillio, founder of Innerlink, an innovative developer of safety and health technology solutions for schools, warns that, "A generic school response plan can almost be as worthless as no plan at all. It is necessary to create a plan specifically designed for your school- one that takes into consideration the unique needs and threats of each and every school's environment." Dr. Gillio also argues that "Administrators absolutely must design their crisis response plan with input from local law enforcement, first responders, parents, community members, and any other local stakeholders who will be affected should a crisis occur."[107]

One the best planning resources discovered in the course of this research is the Multihazard Emergency Planning for Illinois Schools program. This program recommends the following steps in building a reliable, valid and sustainable emergency operations planning process:[108]

1. Identify the planning team.
2. Identify the hazards.
3. Analyze the hazards to determine the vulnerabilities.

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[106] Department of Education, *Practical Information on Crisis Planning*, 1. http://www.ed.gov/admins/lead/safety/emergencyplan/crisisplanning.pdf (Accessed January 8, 2008).

[107] Perkins, "School Security," 62-63.

[108] ISBE, *Multi-Hazard Emergency Planning for Illinois Schools*, 3-2.

4. Develop the plan.
5. Develop a resource base.
6. Train and exercise the plan.

At a minimum, the planning team should consist of school administrators such as the superintendent, principles and assistants, as well as the coordinators of food service, transportation, facilities and grounds and legal counsel. Other valuable members from the school itself may include teachers and staff members with helpful backgrounds such as the school nurse or science and chemistry teachers. Other stakeholders outside of the school itself include local emergency managers, public safety personnel, utility company representatives, hospital representatives, and volunteer agencies in the community such as the Red Cross or Community Emergency Response Teams (CERT).

The planning group can work collectively to identify potential hazards and analyze the hazards for potential vulnerabilities. There are a number of hazard analysis matrices and worksheets available from FEMA to use as a guideline. With each identified hazard, a value should be assigned to the potential frequency, magnitude, warning time, severity and risk priority. This process can assist in prioritizing response plans and assigning resources. A school located directly adjacent to transportation corridors or in close proximity to a chemical plant poses unique risks that must be addressed accordingly and commensurately. Structural engineers in the community can assist in evaluating structural hazards unique to certain buildings. Their evaluation may impact certain response plans such as not designating shelter in place plans in a section of a building with broad unsupported roof spans or unreinforced masonry construction. Similarly, local experts with experience in heating, ventilation and air conditioning (HVAC) systems can evaluate the HVAC systems for vulnerabilities in outside access as well as offer solutions for quick and efficient control of HVAC systems when necessary, as in the case of an inside or outside chemical release.

Based on the hazard assessment and vulnerability analysis, the planning team can create a comprehensive emergency operations plan (EOP). The Multihazard Emergency

Planning for Illinois Schools program outlines the general framework of what a good emergency operations plan should include as follows:[109]

1. The emergencies that will be planned for.
2. How district officials will know that a threat exists.
3. How the district will respond.
4. How the district will support operations.
5. The steps that the district will take to recover.

The EOP should include all of the necessary information required in an emergency such as personnel assignments, emergency contact numbers for all

school personnel as well as local response agencies. Evacuation routes as well as assembly and reunification areas should be identified and documented. The Multihazard Emergency Planning for Illinois Schools program states that EOPs should be comprehensive, all-hazard in approach, flexible and risk-based. The program also states that comprehensive plans should include information about:[110]

1. How the response will be coordinated.
2. How school personnel will communicate.
3. How school personnel will be notified.
4. How parents (and guardians) will be notified.
5. Who will deal with the media and how.

FEMA also recommends that school plans describe:

1. When an evacuation will be ordered (standard evacuations and reverse evacuations).
2. How and when sheltering in place will be accomplished.

[109] ISBE, *Multi-Hazard Emergency Planning for Illinois Schools,* 3-16.

[110] Ibid., 3-16.

3. How students and personnel will be provided with essential supplies such as food, water, and medical supplies.

4. How will the school locate, obtain, and distribute resources.

Schools and public safety agencies would benefit tremendously if they developed response plans in tandem and worked together towards a common goal. When an actual emergency incident occurs, whether terrorist attack or otherwise, each responding agency will have different goals and objectives. It is critical that agencies work collectively and collaboratively to insure that the goals of one agency are not antithetical to another, and hence counterproductive to mitigating the situation efficiently and effectively.

There are various agencies that offer planning and preparedness programs and implementation strategies to assist in developing and implementing a multi-disciplinary response. One such system, the Rapid Responder Crisis Management System© has been awarded the Department of Homeland Security's Safety Act Certification Award and the Focus on Innovation Award from the National Homeland Defense Foundation. Rapid Responder is a crisis management planning system developed by Prepared Response®, headquartered in Seattle, Washington. This system allows facility personnel, police and fire units access to hundreds of site-specific data points, including pre-established tactical plans, floor plans, satellite images, interior and exterior photos, staging areas, hazardous materials locations, utility shut-offs, and evacuation routes for virtually any facility. During a 2003 event at a high school in Spokane, Washington, this system facilitated local emergency responders in containing an armed student within twelve minutes. Within twenty minutes, more than 2,000 students were safely and efficiently evacuated. A system such as this can also serve as prevention through deterring terrorists looking for an "easy mark." This innovative system is currently being installed in 1,275 middle and elementary schools in the states of Washington, Arizona, California, Missouri, Idaho, North and South Carolina.[111]

It is not necessary for schools and public safety agencies to use a system as listed above, as helpful as they might be. Fiscal constraints may prohibit the purchase of a

[111] Prepared Response, "Rapid Responder Crisis Management System."

commercial system. What is critically important is that the different agencies work together towards a common goal. Involving all stakeholders in developing a plan, exercising the plan, identifying deficiencies, making adjustments and refining the plan will insure an effective coordinated response effort when an emergency occurs.

B. ORGANIZATION

It is critical that proper and formal organizational structure is determined and institutionalized prior to having to deal with an emergency incident. An excellent organizational framework that schools can and should use is the National Incident Management System (NIMS). Homeland Security Presidential Directive (HSPD) 5, Management of Domestic Incidents, requires federal agencies to adopt and implement the NIMS and requires state and local government to implement the NIMS to receive federal preparedness funding. The applies to school districts as the Homeland Security Act of 2002, Section 2(10) defines the term "local government" as including school districts.

The NIMS is a comprehensive system that improves and enhances local emergency response operations through the utilization of the Incident Command System. The system provides for the understanding and application of standardized emergency procedures and preparedness measures. The NIMS provides a consistent approach and common terminology for federal, state and local governments to work together efficiently and effectively during emergency response operations. The NIMS integration center provides a checklist in the form of a matrix that can be applied to school districts. The checklist outlines the required activities and responsible parties as follows:

1. Adopt NIMS at the community level. Responsible party- school district administration or school board in partnership with local government.
2. Institutionalize the Incident Command System. Responsible party- school district crisis team(s).
3. Formalize a public information system and a joint information system. Responsible party- school district public information officer.

4. Update emergency plans to integrate NIMS. Responsible party- school district crisis team(s).
5. Establish NIMS baseline and current progress. Responsible party- school district administration.
6. Complete IS-700 NIMS: An Introduction and IS-800 The National Response Plan: An Introduction. Responsible party- school district administration and key personnel.
7. Complete ICS-100 and ICS-200. Responsible party- school district administration and key personnel.
8. Utilize ICS and NIMS terminology during all tabletop and full-scale exercises, and most importantly, actual emergencies. Responsible party- key personnel and local emergency response personnel.
9. Incorporate corrective actions and lessons learned into updated emergency operations plan(s).

School administrators and planning committees should identify what staff will be involved in the school's emergency response and recruit and create critical incident response teams (CIRT) using the ICS model. Using this model, the school should develop a "concept of operations" which should include:[112]

1. An organization chart.
2. A statement about when and how the emergency plan will be implemented.
3. A definition of action levels and their implementation.
4. Which action levels will be implemented, under whose authority and when.
5. The general sequence of actions, before, during, and after the emergency.
6. Designation of who will coordinate with local and state responders and how the coordination will take place.

[112] ISBE, Multi-Hazard Emergency Planning for Illinois Schools, 2-2.

The CIRT should be overseen by the principal or assistant principal, who will be designated as the incident commander. When forming the CIRT, major areas of need should be taken into consideration such as:[113]

1. Physical/medical needs.
2. Emotional/mental health needs.
3. Students with special needs.
4. Staff from all areas of the building and campus.
5. Staff with knowledge of floor plans, utilities, other special areas.
6. Staff with ability to communicate with media effectively.
7. Staff knowledgeable in community resources.

Many of these special skills can be ascertained by having all staff complete a survey measuring specific knowledge, skills and abilities. An illustration of a sample school ICS organization is listed below.

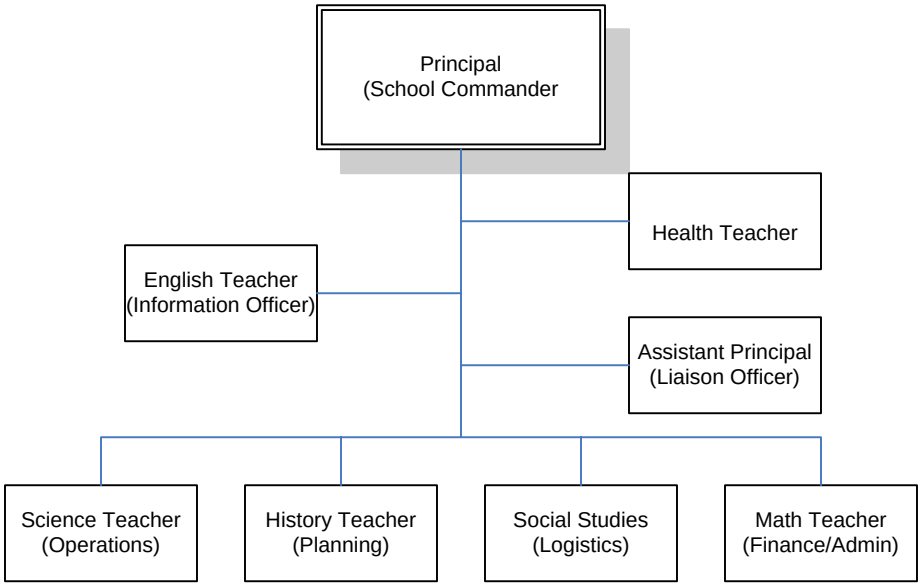

Figure 2. Sample ICS Organizational Chart

[113] ISBE, *Multi-Hazard Emergency Planning for Illinois Schools*, 2-7

It is imperative that schools work closely with outside response agencies to insure that their respective organizational structures integrate and compliment one another during an actual emergency incident. Administrators should work with response personnel in the planning process and have them assist in developing the emergency operations plan. The school's organizational plan when integrated with the organizational plans of first responders results in a unified commend structure, which is illustrated below.

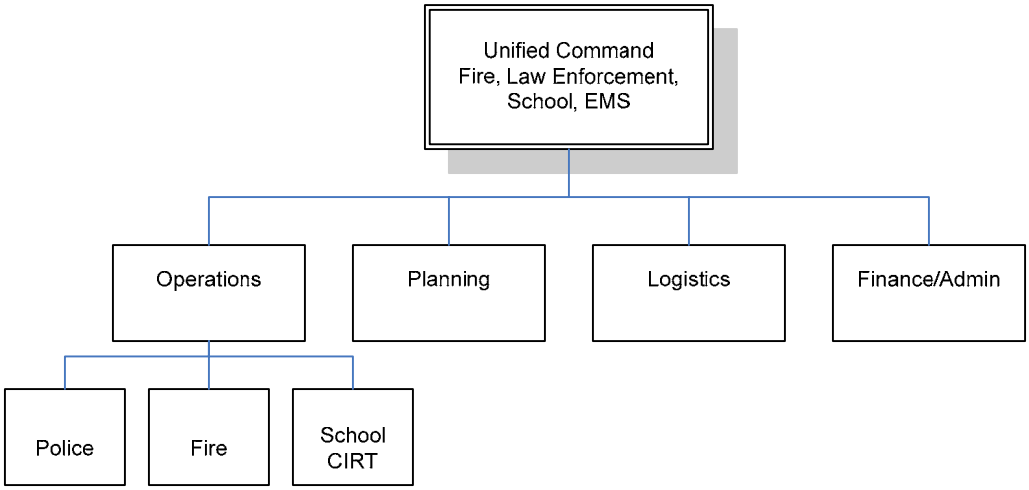

Figure 3. Unified Command ICS Organizational Chart

Schools should also plan for continuity of operations with respect to the established organizational structure. There should not only be a chain of command, but a line of succession in the event of a key member being absent or becoming a casualty during an incident. There should be two trained alternates for each CIRT position. This plan should filter all the way down to individual teachers, who should establish a buddy system. Both teachers should have rosters for both classes and both classes should evacuate to the same area and go to the same predetermined safe areas. Approximately half of the staff should fill ICS positions and half should take care of the students. Additionally, positions should be assigned to those most qualified for each position, not according to seniority.

Schools should develop critical incident response kits that contain detailed check lists and are updated regularly. The kits should be maintained in an accessible area and be readily available to provide first responders with critical information immediately. A well-planned critical emergency response kit should include:[114]

1. Emergency and crisis operations plans.
2. Maps and floor plans.
3. Master keys, access cards or door codes.
4. Emergency contact numbers.
5. Portable radio with channel lists.
6. Utility shut off locations and procedures.
7. Aerial photographs of school and site plans.
8. ICS vests identifying different positions.
9. Student and staff photographs.
10. Cellular phone with extra batteries.
11. Basic emergency supplies.

Since the main office may be unusable or unsafe in the event of an incident, staff should be prepared to work from any location. Accordingly, forms and documentation that should be included are:

1. Evacuation plans.
2. Alternate evacuation plans.
3. Student and staff schedules.
4. Current daily attendance roster.
5. Bus route schedules with student rosters.
6. Press release templates.

[114] ISBE, *Multi-Hazard Emergency Planning for Illinois Schools,* 5-3.

7. Parent notification templates.

8. Student release forms.

9. ICS assignment forms.

C. EQUIPMENT

Equipment in this context is considered those physical resources necessary to effectively implement established emergency operating plans and efficiently sustain those operations for a minimum of seventy-two hours. The ability to communicate between school officials and to local response agencies is perhaps the most important equipment need. Communication can be achieved throughout the entire school and between the main office and classrooms via the school's address/intercom system. Staff should also have the means to communicate with the office and key personnel either by cell phone or portable radio. Key staff should have the ability to communicate with other response agencies during an incident as well.

The ability to monitor areas of the school and developing situations is critical. Surveillance cameras are a cost-effective, time tested technology that can provide monitoring of multiple locations and areas with less people. Newer, but less cost effective technology that can be employed to monitor areas includes sophisticated sensor systems that can detect the presence of explosives, chemical and biological agents. The technology of most biological sensing instruments however, still does not provide for immediate detection of many different, yet deadly biological agents.

Also necessary are basic supplies such as food, water and sanitation supplies for a self sustainment period of not less than seventy-two hours. Medical supplies should be maintained in sufficient quantity and in strategic locations throughout the school. Ideally, each classroom should maintain a minimal amount of equipment in the event of a prolonged hard lockdown procedure. An adequate supply insures that secure compartmentalization would not be disrupted due to a lack of basic supplies strategically placed in multiple locations.

D. TRAINING

The most well written comprehensive plans are useless if staff required to follow them are not properly trained. There are a variety of incident command courses available through FEMA that can be completed on line. All school personnel should be trained with a basic understanding of the incident command system and the school's emergency operations plans. Critical incident response team members should be trained to the level they are expected to function at. School administrators, particularly those that will be designated the school incident commander should receive training to the appropriate levels of incident command, particularly those that educate participants how unified command works at a large scale incident.

Schools and local public safety agencies need to be an integral part of communitywide plans. Comprehensive, multi-hazard emergency management plans must be developed and implemented by local public health, law enforcement, emergency response, and education agencies together. Joint trainings are one way to build partnerships across multi-disciplinary trainings.[115] Public safety agencies generally offer a wide array of educational programs that can be delivered to school personnel including cardiopulmonary resuscitation, first aid, and automated external defibrillator use. A study of teachers in Missouri, Arkansas and Kansas revealed that one third had not received training in first aid, and 40 percent had not received training in cardiopulmonary resuscitation. The data indicated that public school teachers "lacked the adequate emergency care knowledge and skills" due to a lack of training and incentives for training. This revelation, coupled with the fact that schools are essentially "*in loco parentis*," and that school officials have a special responsibility for the students' care is especially troubling. There seems to be a gap in the public's expectation of teachers and the emergency care they can actually provide in times of crisis. Public safety agencies have the experience and knowledge to fill that gap by providing specific training for school personnel.

115 "Schools And Terrorism," 42.

E. EXERCISES

Emergency plans must be exercised and cannot be static; they must be fluid and reassessed based on current extenuating circumstances.[116] Kenneth Trump, the President of National School and Safety Security Services also recommends sharing blueprints of school buildings to local public safety agencies and allowing them to train on campus on weekends so they can become more familiar with the layout.[117] The document *School Safety in the 21st Century: Adapting to New Security Challenges Post 9/11* focuses on operational strategy and tactics. An "all hazards" approach is utilized. The document asserts that preparedness planning, training, and collaboration between schools (staff, faculty, students, parents), public safety agencies (police, fire, and emergency medical), and government emergency management authorities can mitigate the impact of emergencies, improve response, and accelerate recovery. The document closely evaluates school accountability, emergency plans, crisis management teams, the role of the parent, safety assessments and exercises.[118]

Exercising a school's emergency plan provides school staff and other stakeholders the opportunity to identify strengths and weaknesses in the plans, but also provide for meaningful collaboration with local emergency response agencies and the general public. There are two basic types of exercises. Tabletop exercises provide for a real time discussion of plans, policies and procedures as they relate to a given scenario. They also provide an opportunity to clarify and resolve issues concerning overall coordination, roles and responsibilities. Functional, or full scale, exercises test specific plan functions and can be designed to test one function at a time or several concurrently. Functional exercises require approximately nine to twelve months to plan for, depending on the scope and complexity. Types of functional exercises that could be designed and executed by a school would be student care, student accounting, medical treatment, reunification, evacuation, reverse evacuation, and shelter in place plans. All agencies responsible for components of the plan being tested should be involved early in the planning process. A multidisciplinary approach

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[116] Perkins, "School Security," 61-63.

[117] Luna, "The Region."

[118] *School Safety in the 21st Century,* 7.

to exercise planning and design insures a more realistic exercise that addresses the specific concerns of each of the parties involved.

The most important component of the exercise process is identifying weaknesses in established emergency plans and the corresponding response through a critical evaluation of the exercise. This is an excellent opportunity for different agencies to determine shortcomings in communications and collaboration in the response phase in a controlled environment. This is also the appropriate time to reveal resource needs and improve coordination. The ultimate goal should be to make the necessary adjustments and modifications to the emergency plan so response efforts work effectively in tandem during an actual emergency incident.

F. DEVELOPING PSYCHOLOGICAL RESILIENCY—PRE-EVENT PHASE

Notwithstanding a tremendous amount of preparation, an attack by a dedicated, determined terrorist or group of terrorists cannot always be prevented. The effects and impact of the attack, however, can be mitigated through comprehensive pre-incident planning, effective response guidelines, and psychological recovery initiatives. This section deals primarily with developing psychological resiliency and is separated into the three components of pre-event, event and post event initiatives. Butler, et al state:

> The psychological consequences of terrorism are an important determinant of the continuity of society, economic resiliency, health care utilization, and perception of threat and safety.[119]

As a result, they argue that the area of psychology must be integrated into national, state and local planning[120] and that psychological consequences must receive comparable attention to other consequences in response to terrorism.[121]

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[119] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 107.

[120] Ibid.

[121] Ibid., 101.

> Newspapers mentioned that a recent survey showed that seven out of every ten Americans suffer psychological problems following the attacks on New York and Washington.
>
> — Osama bin Laden to Mullah Omar.[122]

The attacks on 9/11 produced a tremendous reaction across the country and around the world. Days after the attacks, approximately 90 percent of the residents of New York City and Washington D.C. reported significant psychological distress and 20 percent of all Americans reported symptoms of distress.[123] The central goal of terrorism is to cause fear and panic; however fear and panic can be lessened or controlled with proper preparation.

The pre-event phase can be defined as the activities that take place prior to an event or terrorist attack. Preparedness is a central component in pre-event planning. Preparedness is a critical first step in effectively dealing with acts of terrorism from many perspectives, including response and recovery. Brandon and Silke purport that a preparedness strategy that focuses on fear can create a chronic state of anxiety that can deplete individual and community resources. They argue that instead, a strategy that highlights our strengths and capacity for recovery would not only save resources, but may even help create them.[124] Anticipating or envisioning an attack is a helpful way in which to initiate the planning process. The 9/11 Commission criticized key officials for a lack of imagination in not anticipating aircraft being used as missiles, particularly from within the continental United States. A national dialogue of unexpected attacks (to include schools) would provide a basis from which to analyze what could occur but also involve the public so that the practices of communities and their potential responses could assist in the development of response and recovery strategies. Brandon and Silke state:

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[122] Susan E. Brandon and Andrew P. Silke, "Near and Long-Term Psychological Effects of Exposure to Terrorist Attacks," in *Psychology of Terrorism*, ed. Bruce Bongar, Lisa Brown, Larry Beutler, James Breckenridge and Philip Zimbardo (New York: Oxford Press, 2007), 175.

[123] Ibid., 178.

[124] Ibid., 186.

> To the extent that Americans begin to view terrorist attacks in other countries as occurring, in some sense, also to ourselves, our expectations should begin to change so that even the unimaginable, such as a school bombing , is perceived as "experienced," if only vicariously.[125]

The Haddon Matrix is a model for organizing responses to terrorism within various phases and factors involved in the events. This model offers a useful way to organize components of the mental health and emergency response systems for prevention and intervention.[126] Specific pre-event planning activities that schools and public safety agencies should undertake to develop psychological resilience include the following factors adapted from the Haddon Matrix:

1. Open and honest discussion about the grim reality and potential effects of a terrorist attack upon a school.
2. Psychological first aid training for all school staff, and local public safety employees.
3. Integrate psychological and mental health concerns into emergency plans.
4. Exercise the response plan through regular tabletop and full scale drills to familiarize affected people with expectations before an attack occurs.
5. Develop strategies to address mental health needs of students, faculty, and public safety personnel.
6. Initiate and sustain relationships with mental health professionals and develop a plan to contact and utilize them during times of crisis.
7. Develop reunion protocols to release students to family members as soon as practicable during or after an event.
8. Prepare materials and protocols for media release and public education. Spokespersons should be identified in advance and trained appropriately.

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[125] Brandon and Silke, "Near and Long-Term Psychological Effects of Exposure to Terrorist Attacks," 187.

[126] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 102.

School personnel serve as defacto emergency response workers, responsible for the food, shelter, and physical and emotional well-being of children in their care. Safety issues that are addressed *prior* to a terrorism event can give reassurance to parents whose children may require site evacuation, quarantine measures, reunion protocols, or sheltering in place for twenty-four to seventy-two hours.[127] Emergency plan that take parents into consideration help create the sense that the children will be well cared for and will not be left alone. This sense alone will lessen the concern of many parents, thereby ameliorating widespread panic.

Another significant concern is how to deal with a situation in which one or more of the emergency response personnel have children that are involved in the incident itself. It is unlikely that these personnel will be able to effectively cope with the situation and perform their assigned duties. Indeed, there may be a significant portion of the workforce lost if a large percentage of emergency services personnel have children in school, especially in the same community. Even if the families of the first responders are not directly involved, they will still be concerned about the safety and well-being of their families while they are at the scene and this may affect their job performance. Butler, et al recommend looking to military models to develop and improve the psychological support services necessary to facilitate the efforts of the employees.[128] First responders must be psychologically prepared to deal with the worst possible circumstances and an attack on a school certainly qualifies.

G. CHAPTER SUMMARY

This chapter discussed and reflected on the preparedness activities that schools can employ. This discussion included dimensions and elements such as the emergency planning process, staff organizational structures, necessary equipment, training, conducting both table top and full-scale exercises, and finally, developing psychological resiliency prior to an attack. Comprehensive and deliberate preparedness activities are central to developing effective emergency response plans and procedures. Emergency response to potential threats and specific events is analyzed in the next chapter in tandem with methodologies to support psychological resiliency during an attack.

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[127] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 110.

[128] Ibid., 113.

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V. EMERGENCY RESPONSE

Emergency response protocols can be implemented in one of two situations or scenarios. One scenario is a potential threat, where a threat or potential of threat exists, but no actual act of violence has been committed at the school in question. The other situation would be one in which an actual incident has occurred at or in proximity to the school, necessitating the implementation of a specific emergency incident protocol. In each scenario, both schools and local response agencies have certain responsibilities and specific protocols to follow.

A. POTENTIAL THREAT

Several different situations can be treated as a potential threat. Both substantiated, credible, and unsubstantiated non-credible intelligence reports can be treated as a threat, albeit with varying levels of response. On a national level, schools should monitor the Homeland Security Advisory System color-coded levels and have action plans in place to be implemented with each successive increase in risk of attack level. The American Red Cross has developed a general guideline of recommended actions for schools based upon the threat advisory system.[129] The recommendations at the low (green) and guarded (blue) levels include primarily preparedness activities such as educating staff and conducting emergency drills using the school's established emergency plan. The elevated (yellow) level includes recommendations to be alert to suspicious activity and to check stocks of emergency supplies. The high (orange) level recommends reporting any suspicious activity to local law enforcement agencies, reviewing emergency plans, and preparing for inquiries from parents and media. The severe (red) level recommends all of the recommendations at lower levels and including

[129] American National Red Cross, "Homeland Security Advisory System Recommendations for Schools" (August 2002), http://www.redcross.org/services/disaster/beprepared/hsas/schools.pdf (Accessed December 27, 2007).

monitoring radio and television for current information or instructions, immediately reporting any and all suspicious activity, 100 percent identification check and escorting anyone entering the school other than staff.

Notwithstanding a comprehensive analysis, preliminary considerations suggest that schools should also consider taking the same actions including canceling outside activities, canceling school altogether or implementing lock down procedures if other school attacks occur and especially if notified of other attacks through their local law enforcement agencies. This is a function that can be served by state fusion centers. When a fusion center becomes aware of school attacks in other regions or states, it should have a method to quickly and efficiently disseminate that information to every school district within its jurisdiction. In addition to lock downs, schools need to have plans in place for students off campus on field trips.

B. EVENT SPECIFIC

In Chapter II — Threat Analysis, several different types of possible attacks were discussed. It is imperative that schools develop specific response plans for each different type of attack in collaboration with local emergency response agencies. Each type of incident may warrant widely differing response protocols. For example, a release of a chemical outside of a building would require shelter in place protocols whereas a chemical release within a building would necessitate an immediate evacuation. Speed and efficiency of response will be critical, regardless of the type of scenario.

In the initial phases of an incident, school staff will be assuming the role of first responders and will have to rely on their own plans and resources until emergency responders arrive. In urban areas, response should be relatively quick, but may be prolonged significantly in the event of multiple incidents occurring in the form of a coordinated systematic attack. School staff must be prepared for this contingency and be able to act on their own for a period of time if necessary. Although actions schools must take in the initial phase of an incident vary widely, general basics include:

1. Gathering intelligence- location of incident, type of incident, number and location of intruders, description of intruders, weapons present, injuries, etc.

2. Follow the appropriate checklist based upon the situation- alert over address system, evacuation, reverse evacuation, and lock down.
3. Clear students from hallways and open areas, shelter students as appropriate and provide medical care as necessary.
4. Account for students- report to main office or school incident commander as necessary and appropriate.
5. Reroute buses if necessary.
6. Other facility specific actions- shutting down HVAC systems, sealing off areas of building, etc.
7. Brief arriving law enforcement officers and emergency responders as quickly as possible.

For the emergency responders, time is of the essence. The fact that they have been dispatched to a school for an incident means that the attackers already have a head start. Giduck argues that when an attack occurs in the United States, it will be local law enforcement that respond initially and may be on their own for hours until the FBI's HRT arrives, if they are called in at all. He also points out that the Posse Comitatus Act prohibits U.S. military from functioning in a military or law enforcement capacity on U.S. soil.[130] Giduck also claims that a Beslan type situation will present a conundrum for which we are unprepared. Once it has been determined that a hostage taking is of a terrorist nature, and not a criminal offense, the federal government will assume jurisdiction. The previous strategy of local or federal law enforcement agencies has always been to negotiate with hostage takers, but the doctrine of the United States is not to negotiate with terrorists.[131]

It is likely that terrorists attacking a school may be doing so to make a political statement, have no intention on negotiating, and ultimately plan on mass murder, as they did in Beslan. If this is true, it is critical that responding agencies act swiftly, to reduce

[130] John Giduck, *Terror at Beslan: A Russian Tragedy With Lessons for America's Schools* (Golden, CO: Archangel Group, 2005), 359.

[131] Ibid., 360.

the overall loss of life. It has been said that the first twenty minutes of an incident will determine the next several hours. A concept currently being taught to law enforcement rapid response and entry teams is the OODA loop. This concept was designed by military strategist Colonel John Boyd of the United States Air Force. According to Boyd, decision making occurs in a distinct cycle. This cycle consists of observe, orient, decide and act. An individual or group that can process this cycle quickly, observing and reacting to unfolding events more rapidly than an opponent, can thereby infiltrate the opponent's decision cycle and gain an operational advantage. Boyd explained that the OODA loop is actually a set of interacting loops that are kept in continuous operation during combat. Boyd's diagram below illustrates that decisions are based on observations of the evolving situation mitigated with intrinsic filtering of the problem being addressed.

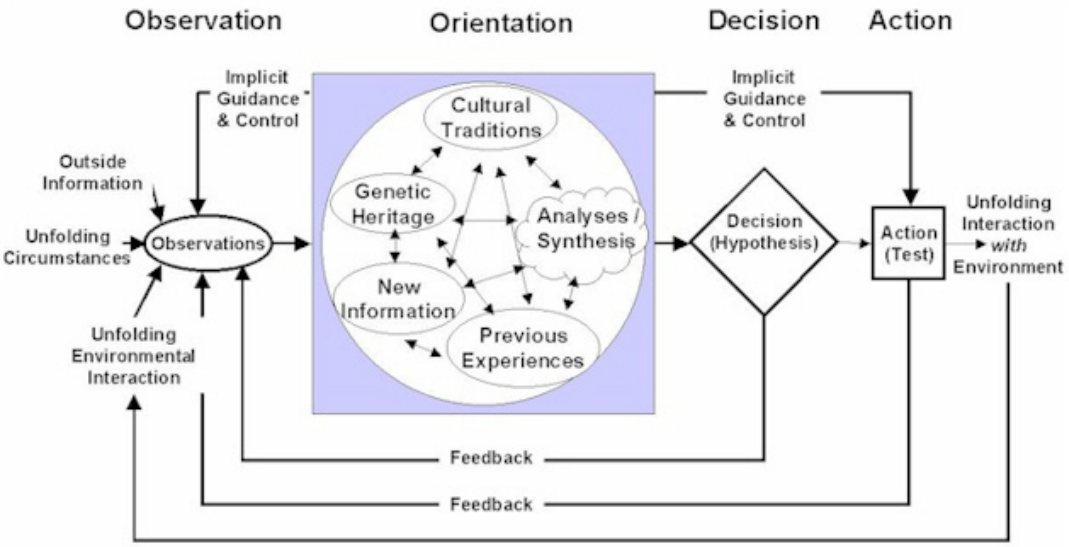

Figure 4. OODA Loop from Colonel John Boyd

Joe Bierly believes that the OODA loop can be compressed through planning and actions in advance of an incident such as pre-planning, walk-throughs, rehearsals, exercises, staged gear and equipment, N-hour sequence, forward deployment and quickly communicated mission orders.[132] Advance planning, preparation, and a quick and

[132] Joe Bierly (Senior Director of Public Safety Programs, Oracle), personal communication, Alsip, IL, November 14, 2007.

efficient response by emergency personnel will be central to saving lives in dealing with a terrorist attack on a school. Entry teams must make contact and engage the attackers as quickly as possible. The more time the attackers are permitted to continue their siege, the more fortified their position will become, rendering subsequent counter offensive measures less effective.

C. SUPPORTING PSYCHOLOGICAL RESILIENCY—EVENT PHASE

The event phase can be defined as the activities that take place during an actual emergency in the form of a terrorist attack or other disaster. In disaster situations, people who work to save themselves and others are more likely to survive and be healthy than people who shrink in fright. A terrorist attack is vastly different than a typical hostage situation whereby the hostage takers or hijackers use human collateral to bargain with another party to reach a desired outcome. In the event of a terrorist attack, potential victims must be prepared to fight for their lives. On 9/11, a primary reaction of the American people was one of challenge and refusal to cower as victims. The response was significantly problem focused and not emotion focused.[133]

Specific pre-event planning activities that schools and public safety agencies should undertake to support psychological resilience include the following factors adapted from the Haddon Matrix:[134]

1. Implement a public health-mental health response.
2. Provide basic needs and interventions.
3. Implement psychological first aid.
4. Distribute information appropriate to the event.
5. Describe to the public the available organizational and communication systems.

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[133] "Stress and Coping," online book NS 4133 *Psychology of Fear Management and Terrorism* https://www.chds.us/courses/mod/book/view.php?id=22977 (Accessed October 18, 2007).

[134] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 103.

Accurate and timely disseminated public information is vital in lessening or avoiding mass hysteria and panic. Butler et al argue that the provision of clear, credible, and timely information during and after an attack is a critical aspect of response. The importance of immediately available, consistently open communication cannot be overstated.[135] Such communication has a significant impact on lessening fear and anxiety and should be made readily available to the media for mass dissemination to the public. If the media is not provided with timely and accurate information, it may speculate regarding details of the incident and report false information which can incite fear and panic. History is replete with instances of inaccurate information being broadcast to the public.

D. CHAPTER SUMMARY

Emergency response is a critical component in neutralizing an attacker or group of attackers and minimizing the impact on life safety to students and staff. Federal assets may take a significant amount of time to arrive on the scene, so schools and local response agencies must be prepared and train for the worst case scenario. Emergency personnel, especially law enforcement, must be mentally prepared to act with alacrity and dispatch to counterbalance any advantage the attackers the attackers may have and quickly defuse the situation. Once the situation is rendered safe, psychological recovery should be made a priority. Schools should also have formal plans in place to insure the continuity of operations.

[135] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 122.

VI. RECOVERY

A. SUSTAINING PSYCHOLOGICAL RESILIENCY—POST EVENT PHASE

The post-event phase can be defined as the period immediately after a terrorist attack has ended and the threat is neutralized. This phase can also be called the recovery phase. Specific pre-event planning activities that schools and public safety agencies should undertake to sustain psychological resilience include the following factors adapted from the Haddon Matrix:[136]

1. Minimize secondary consequences.
2. Continue psychological first aid.
3. Conduct assessments to identify specific needs for treatment of psychological injury.
4. Consider intervention needs of special populations.
5. Communicate that preparedness helped decrease the impact of the attack (if appropriate).
6. Produce public information and warnings.
7. Promote family and community cohesion.
8. Evaluate effectiveness of emergency plan and response.
9. Establish strategies for community healing.

The desired end results of these factors adapted from the Haddon Matrix are:[137]

Mitigate or prevent adverse consequences including:

1. Distress.
2. Negative behavioral change.

[136] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 104.

[137] Ibid., 105.

3. Psychiatric illness.
4. Poor job performance or loss of job.
5. Physical injury.
6. Increase positive adaptive behaviors.
7. Facilitate posttraumatic growth.
8. Increase empowerment.
9. Provide an environment that allows for rapid recovery and rehabilitation.
10. Minimize disruption in daily routines of life.
11. Enhance community cohesion.

As stated previously, the primary purpose of terrorism is the widespread infliction of psychological pain.[138] If we invest in preparedness, response and recovery activities that develop psychological resiliency, we severely blunt the desired and intended effects of a terrorist attack. By doing so, we effectively deal a blow to the terrorist's "arsenal."

B. CONTINUITY OF OPERATIONS

Michael and Chris Dorn emphasize the importance of returning to "business as usual." They state that Israel police officials stress the need for citizens, businesses, governmental agencies and other impacted organizations to return to normal business as quickly as possible after an attack. They claim if this is not accomplished, the impact of the actual event is greatly increased.[139] They also argue that a society that allows acts of terrorism to significantly disrupt how people function on a daily basis may increase the likelihood of future attacks and may invite more attacks of the same type.[140] Accordingly, in addition to plans for mental health recovery, schools should have plans for continuity of operations.

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[138] Butler, Panzer and Goldfrank, *Preparing for the Psychological Consequences of Terrorism*, 99.

[139] Dorn and Dorn, *Innocent Targets*, 68.

[140] Ibid., 69.

An attack may result in incapacitation of school staff and teachers and may render the building uninhabitable for a period of time. Larger school districts may be able to relay upon multiple facilities to divide the load of students amongst. Smaller school districts should consider developing formal memorandums of understanding or other assistance agreements with neighboring schools districts if assistance is needed. For disruptions of limited duration, schools could consider temporary distance learning activities through teleconference or other web based programs. If these plans are put into place prior to a significant incident, the transition towards "getting back to normal" will run more smoothly.

According to a May 17, 2007 report by the United States Government Accountability Office (GAO), few school districts emergency plans contain procedures for student education in the event of an extended closure even though it is a federally recommended practice. The report claims that 56 percent of school districts surveyed do not include plans for continuation during an extended school closure. The report continues to highlight that 30 percent of schools have a procedure to use electronic means or telephone trees to communicate academic information to students, 12 percent of schools provide for web-based learning instruction, 10 percent provide for mailed lessons and assignments, and 7 percent provide for academic instruction through local radio or television stations.[141]

C. CHAPTER SUMMARY

The intent of terrorism is to terrorize. Terror and fear are exacerbated and protracted in the absence of plans to sustain psychological resiliency and return to normal operations. Formal plans for mental health recovery and continuity of operations are central to minimizing and counteracting the impact of a terrorist attack. Much can be learned about these and previously mentioned homeland security activities by analyzing the current practices of school districts in the United States and abroad.

[141] US, GAO, *Emergency Management*, 15.

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VII. COMPARATIVE ANALYSES/CASE STUDIES

A. SCHOOL PROTECTION IN OTHER COUNTRIES

1. The Beslan Experience- Important Lessons Learned

The most heinous terrorist attack on a school occurred in the small town of Beslan, near the troubled Russian republic of Chechnya in September of 2004. A total of 323 hostages, including 186 children, died in the school terrorist siege. What the United States can learn from this tragedy is not entirely about what went right, but more about what went horribly wrong, and the implications for the United States.

The terrorists in the Beslan attack were primarily ethnic Ingush and Chechen Sunni Muslims of the Hanafi sect who were demanding the release of prisoners captured during the Nazran raid and the complete withdraw of Russian troops from Chechnya. Unique to the Beslan attack is the participation of Chechen female suicide bombers also known as the Black Widows.[142] This is a group of Muslim Chechen women who have survived the deaths of their own husbands and family members and have been recruited to serve as human bombs in terrorist attacks.[143] Atypical attackers (women) on an atypical target (children) set this attack apart from previous attacks seen up to this point and exemplify the changing face of violence in the world.

Terrorism can be an overwhelming psychological phenomenon. When the public gets scared, it overreacts, causing a litany of other problems in the wake of the initial event. Undoubtedly, an attack on children in an educational institution in the United States would create mass panic and hysteria, and paralyze many people with fear. As in the case with Beslan, a linkage between taking over a school is clear from both a societal and terrorist perspective as society perceives a school as offering a sense of security and safety. Therefore, attacking a school exposes society's fundamental vulnerability to terrorism.[144]

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[142] DOJ, *Antiterrorism Advisory Council Newsletter*, 3.

[143] Giduck, *Terror at Beslan*, 60.

[144] Forster, "Beslan: Counter-terrorism Incident Command: Lessons Learned," 1-7 .

Peter Forster contends that the Beslan incident exposed significant failures in preventing terrorist situations through the mismanagement of intelligence. Forster reasons that the initial failure in the Beslan incident occurred at the local level in the execution of an effective anti-terrorism strategy. Prevention and protection requires a strategy based on deterrence and intelligence. Perhaps most disturbing is the fact that local law enforcement had arrested a potential collaborator who had informed them of the possibility of school attacks, yet no local counter-measures were implemented. Shockingly, no police were deployed near the school nor did authorities consider canceling school or locking down the facility.[145] The fact that many of the Ingush families living in Beslan also packed up and left three days before the attack also went unnoticed.[146] The failure to recognize this mass departure as significant and the lack of action taken on the informant's information suggests that the ability of Russian intelligence to communicate threats is lacking.

The 62-hour ordeal began at 8:45 A.M. and the Russian Special Forces, or Spetsnaz, were activated at 10:00 A.M., arriving in waves between 1:00 P.M. and 3:00 P.M. Two divisions of forces were utilized, Alpha and Vympel. These units are comparable to the United States 1st Special Forces Operational Detachment- Delta, which is an element of the Joint Special Operations Command (JSOC). The Russian Special Forces are unique, however, in that they are not specifically located within the army or navy, but throughout the country's force ministries. The Spetsnaz can also perform special operations outside of the traditional military or government units such as law enforcement functions on their own soil, whereas the provisions of the Posse Comitatus Act severely limits the use of US Special Forces. If a similar incident were to occur in the United States, local law enforcement will be the first responding agency and it could take the Federal Bureau of Investigation's Hostage Rescue Team (HRT) hours to arrive.

Prior to the Beslan incident, Alpha and Vympel had an excellent record of operations dealing with neutralizing terrorists and rescuing hostages. Although often publicly criticized for the controversial methods used to mitigate the terrorist attack at the

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[145] Forster, "Beslan: Counter-terrorism Incident Command: Lessons Learned," .2.

[146] Giduck, *Terror at Beslan*, 114.

Nord Ost Theater in north Moscow, they were actually highly successful in saving the lives of more than 700 people. The news media leveled pejorative editorials at them for the use of nerve gas, which rendered the terrorists as well as the hostages unconscious. Unfortunately as a result, 129 hostages died from the effects of the gas, as there were not enough emergency medical personnel to treat the victims in a timely fashion. They didn't realize that the agent used in the theater had absorbed into the victim's tissues, which caused many to stop breathing after initial emergency medical assistance had already been provided.[147] Alpha and Vympel were not able to use gas at Beslan, as the terrorists were equipped with gas masks.

Notwithstanding the extensive use of explosives and booby traps, coupled with the fact there were an estimated 35-50 terrorists to deal with, John Giduck argues that crowd control posed an extremely significant challenge as crowds proved to be the single biggest obstacle to the elite counter-terror teams establishing positions, developing an assault plan, and attempting to stabilize the situation sufficiently to even attempt a surprise attack.[148]

While the Beslan incident ended tragically, there is much that can be learned. Giduck believes that it is a certainty that all useful conclusions drawn from Beslan- in the hope of preventing the deaths of children elsewhere in Russia and the wider world- will have to come from expert's independent analysis and the application of those lessons to their own countries, security systems, and laws.[149]

As a result of the attack in Beslan, Russian Special Forces were asked what the United States could do to protect its schools. Members of the Russian Special Forces made the following recommendations:

1. School security should be a large system, with the most important component being the information and intelligence system.
2. School officials must take on a tactical mindset.

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[147] Giduck, *Terror at Beslan*, 103.

[148] Ibid., 131.

[149] Ibid., 234.

3. Extensive use of technology, especially surveillance and counter-surveillance.
4. The entire school compound should be fenced with iron doors at all exits, entrances and gates.
5. Gates should be electronic and open by remote control.
6. Every employee in a school should be trained to react to emergencies.
7. Effective crowd control during an incident is critical to operations.

It is important to note that these actions were not taken prior to the incident at Beslan, but are recommendations made as a result of the failures. The Spetsnaz had two additional strongly recommended suggestions that are not likely to be accepted in the United States based upon our current culture and constitutional principles. The first is the installation of "special neutralizing equipment" which is a delivery system for nerve gas as a preventative measure. Their primary argument is that "if everyone is unconscious, fewer people will die, and the only reason to deny ourselves this tactic is our refusal to accept reality."[150]

The second equally controversial recommendation is to arrest the families and friends of the terrorists once their identities are known. They advocate taking them out to the site and threatening them with execution if any children or hostages are killed. Their belief is that this practice would serve as an effective deterrent to would be terrorists if they realize that their actions will in effect place their families in harm's way. They point out that this approach was successfully used in the mid 1990s when a Turkish passenger ship was taken and the Turkish Secret Service rounded up the families of the hijackers. As a result, the terrorists let all the hostages go free.[151] It is clear that neither of these practices would ever be advocated or accepted in any democratic country, including the United States and therefore cannot be seriously considered.

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150 Giduck, *Terror at Beslan,* 257.

151 Ibid., 260.

In summary, there are important lessons that can be learned from previous Russian experience. Some of these concepts could easily be implemented with the United States while the more controversial practices would clearly not be accepted. While using gas to render terrorists (and victims) unconscious or threatening family members of terrorists would not be acceptable in the United States, there are practices that are transferable to the United States.

Urban area schools within the United States would benefit from a more robust security system with a strong emphasis on information and intelligence. Moreover, the physical security infrastructure recommendations would be useful as well. The United States has access to some of the most advanced technology in the world and should take advantage of available surveillance and counter-surveillance systems. School administrators should take on a tactical mindset and all school employees should be trained in how to quickly and effectively react and respond during a terrorist attack or any other emergency situation. Finally, school campuses should be treated as compounds and implement physical security measures such as perimeter fencing and fortified entrance doors with electronic locking/access mechanisms.

2. Israel's School Protection Practices

Indisputably, Israel has experienced an abundance of terrorist attacks, including attacks on schools and school buses. Michael Dorn quotes an Israeli police official as stating, "Israel does not claim to be the best at combating terrorism, but we are among the most experienced."[152] This statement is certainly well supported by the fact that between September 2000 and December 2005, Israel endured over 22,400 terror attacks causing 7,250 casualties and over 1,000 deaths. Over half of these deaths were caused by suicide bombings.[153] Recorded attacks, beginning in 1968 through present day include several attacks on buses carrying children and suicide bombers at schools. More than 50 adults and children have been killed and hundreds wounded. Some attacks even took place

[152] Dorn and Dorn, *Innocent Targets*, 67.

[153] Jeffrey Larson and Tasha Pravecek, *Comparative U.S. Israeli Homeland Security*. Future Warfare Series no. 34 (Maxwell AFB, AL: USAF Counterproliferation Center, 2006), 3. http://www.au.af.mil/au/awc/awcgate/cpc-pubs/larsen3.pdf (Accessed July 7, 2007).

during field trips. Methods of attack vary from vehicle borne improvised explosive devices to suicide bomber vests. Most recently, on June 14, 2007, Hamas' military wing, the Izzidin al-Qassan Brigade fired rocket propelled grenades and mortars into the Rosary Sisters School in Gaza.[154]

Dorn argues that the school-related attacks in Israel, Russia and other countries have implications for those responsible for school safety, plan development and emergency response in the United States. A comparative analysis of these incidents can be useful in developing plans here in the United States. Jeffrey Larsen and Tasha Pravecek believe that there are lessons from vast Israeli experience that might enhance homeland security efforts in the United States.[155] Israel's past and current experience has shaped the way in which they protect themselves, respond to, and recover from attacks. According to Dorn, Israel's schools are "virtual fortresses, bristling with commandos, arms and checkpoints" although the actual situation is probably much less surreal.[156]

As a result of two separate attacks where terrorists gunned down Israeli school children on field trips, armed guards now accompany children on field trips in the more exposed West Bank settlements, but not always in Israel proper (less risk). The schools will contract with a private security company, which supplies an armed guard. These guards are usually young and have recently completed their military service in a combat unit. Some are field medics who can also render emergency medical care if necessary. A less expensive solution is the school asking for parents with a license to carry a weapon to accompany the group with their weapon. Every city/region employs a security officer that must approve field trips for schools with that area to insure that there will be enough armed guards or parents to provide an acceptable level of security.[157] Buses are generally an attractive target due to the lack of physical protection; so many buses are also

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[154] Jeffrey Fleishman, "In Gaza, Hamas Walks an Ideological Tightrope." *Los Angeles Times* (July 13, 2007) http://www.latimes.com/news/nationworld/world/la-fg-extreme13jul13,1,6503417,full.story?coll=la-headlines-world&ctrack=6&cset=true (Accessed August 3rd, 2007), 1.

[155] Larson and Pravecek, *Comparative U.S. Israeli Homeland Security, ix.*

[156] Dorn and Dorn, *Innocent Targets*, 38.

[157] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, August 14, 2007.

equipped with bulletproof glass and sidings, especially in the West Bank to transport students from small settlements to other settlements to attend school. Due to recent rocket attacks in Sderot, parent associations threatened to strike, contending that the students should be bused to another town to attend school to provide a safer environment. Sderot Mayor Eli Moyal disagreed, stating that transporting thousands of children to another town is "madness." As a result, the Ministry of Education has decided to enable the children of Sderot to study in safety by conducting all of the classes in the school's bomb shelters.[158] Additionally, in response to parents' demands, the Ministry has decided to build more than 50 protected bus stops throughout Sderot as well as increase the number of buses to reduce commuting times.[159] Moreover, as a result of the Ma'a lot school massacre, armed security guards are stationed at most schools. In 2003, civilian guards numbered 50,000 more than those employed by Israel's three largest industrial corporations. Among other things, they guard every school, college and university.[160]

Israel and the United States share some of the same threats to their security including the global was on terror, state aggression by sovereign powers, weapons of mass destruction, and trans-border issues.[161] The Israeli counterparts to the United States NORTHCOM are the Israeli Defense Forces (IDF) and the Home Front Command (HFC), which is one of four IDF commands; however their mission is entirely domestic and does not involve protecting Israel's borders. The HFC also maintains the overall responsibility for law enforcement, fire, emergency medical services and the public health system. In time of war, the HFC has command over these systems, whereas NORTHCOM does not. There is no Israeli equivalent to the United States Department of Homeland Security, as comparable functions exist with the police, which is run by the Ministry for Public Security, and other government agencies under the responsibility of the Ministry of Defense, Ministry of Commerce (for customs), and the Ministry of the

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[158] Gil Ronen, "Tamir: Sderot Kids Will Study Underground" IsraelNationalNews.com (August 28, 2007) http://www.israelnationalnews.com/News/News.aspx/123480 (Accessed August 28, 2007), 1.

[159] Mijal Grinberg, "Tamir Vows School Will Open On Schedule in Sderot" Haaretz.com (August 28, 2007) http://www.haaretz.com/hasen/spages/897208.html (Accessed August 28, 2007).

[160] Doron Zimmerman and others, eds., *How States Fight Terrorism: Political Dynamics in the West* (Colorado: Lynne Rienner Publishers, 2007), 168.

[161] Larson and Pravecek, *Comparative U.S. Israeli Homeland Security*, 162.

Interior (for immigration).[162] Israel also employs the Mossad, which is the counterpart to the United State's Central Intelligence Agency. The Mossad, the Israeli Security Agency (Shin bet, Shabak), and the IDF Intelligence Branch (Aman) gather intelligence and launch covert counter-offensive operations.[163] One of these groups could be among the first to receive critical information of impending plans to attack a school and may thwart the plans before put into motion.

Israel maintains a special police school security unit that receives intelligence from the domestic security service. When intelligence is received regarding a specific threat to a specific school, they take countermeasures including increased uniformed patrols and saturation with undercover plain-clothes police officers. Additionally, the private security officers who are responsible for security at the school are trained on police guidelines and must comply with police rules and procedures.[164]

In the United States, the guiding homeland security policies and operational plans are the National Strategy for Homeland Security, the National Response Plan (soon to be the National Response Framework) and the National Incident Management System. In Israel, the civilian population follows the brochure *In the Event of a Genuine Alert, Information on Civil Defense for the Family* which provides specific instructions on what to do before, during and after an attack, either conventional or unconventional.[165] The U.S. policies have a broad focus, which does not specifically address schools. The Israeli directive actively involves the citizenry at large, and by extension involves schools.

Perhaps the most impressive component of Israel's homeland security efforts that can be incorporated into practice in the United States is its extremely high level of engagement with the civilian population. Israel was the first and remains the only country to develop and implement measures to protect its entire civilian population

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[162] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, August 14, 2007.

[163] Zimmerman and others, eds., *How States Fight Terrorism*, 162.

[164] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, August 14, 2007.

[165] Larson and Pravecek, *Comparative U.S. Israeli Homeland Security*, 13.

against a full-scale chemical attack.[166] The civilian population is also provided with a government funded civilian protection program including warnings and sirens, a medical response kit (includes antibiotics and Atropine to be used in the event of a nerve gas attack), a protective kit (includes gas mask and filter), protected spaces, and specific instructions broadcast via radio and television. There is a distinct nexus between a prepared, involved citizenry and improved school security. If the population as a whole is prepared, the preparedness will enhance school security.

In Israel, education regarding response to terror attacks is provided to every citizen from elementary grades through high school. Unfortunately, the United States appears incapable of adequately maintaining the most basic of programs including its failed Drug Awareness and Resistance Education (DARE) program due to local law enforcement agencies debating with schools about which agency is going to pay for the cost of the program. In Israel, trained Homefront Command Soldiers visit schools to instruct children on how to protect themselves, and teachers receive training on how to prepare their students for attacks.[167] Conversely, very little, if any training regarding terrorism is currently provided in schools in the United States.

The federal government has developed a plethora of complicated and grandiose plans to deal with the terrorist threat and possible attacks within the continental United States but has utterly failed in the engagement and involvement of the citizenry at large. Interaction with the citizenry has fallen upon the shoulders of state, and mostly local public safety agencies, which receive little direction and inadequate funding from the federal government. While the various grant programs such as the Urban Area Security Initiative (UASI) have been a windfall in terms of the purchase of equipment, they neglect to fund the most precious commodity- people. People are the critical key to engaging and training the public to impart the concepts of self-sufficiency training and preparedness, as they have done so successfully in Israel.

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[166] Larson and Pravecek, *Comparative U.S. Israeli Homeland Security*, 5.

[167] Ibid., 40.

There are several key Israeli homeland security concepts and practices that could be adopted in the United States. Some may be more readily accepted or cost effective than others. The following are those that may be readily accepted in the United States:

1. Interagency Cooperation- Israel continually conducts realistic drills and scenarios with all agencies that will be involved in responding to an attack. They also include schools in the planning process, exercise simulations and critiques.
2. Public Education- A major education campaign complete with the distribution of necessary literature and safety/medical equipment to citizens.
3. The use of advanced technology such as sensors and surveillance cameras.
4. The use of barriers and fences to provide security and buffer zones.
5. The National Police Force School Security Unit concept.

The following practices would not be readily accepted in the United States due to various differences in size, culture, attitudes, previous experience, cost and governmental structure:

1. Tight Internal Security- Metal detectors and armed guards at all public buildings, including schools, shopping malls, etc.
2. Protected Spaces- Schools in Israel are required to have a room built of reinforced concrete with a blast door with protection against chemical or biological attacks. This requirement is considered inadequate by some. Minister Tamir said on August 23, 2007 that a recent High Court ruling with regard to fortification of schools would make it impossible for the children to begin the school year on time. The IDF Home Front Command instructed the Ministry to let the school year begin as scheduled, using the current "sheltered space" concept of protection.[168]

[168] Ronen, "Tamir," 1.

3. Profiling- The Israelis previously used a color-coding system with license plates to differentiate between those from the West Bank and Gaza. The practice of profiling however is starting to secede as evidenced by the Israeli Airport Authority's recent announcement that they will no longer be singling out Arabs for additional scrutiny.[169]

4. In summary, Israel's sordid history of dealing with a seemingly endless amount of terrorist attacks has resulted in the promulgation of one of the most robust homeland security practices in the world. While some practices may be considered controversial or cost-prohibitive, many can be easily and effectively employed in the United States.

3. School Protection in the United Kingdom

Very little information exists regarding protecting schools from terrorist attacks in the United Kingdom. It is likely a result of the fact that the U.K. has not experienced attacks on schools similar to Russia and Israel. The author was able to locate one comprehensive document outlining suggested school security measures that take into account an "all hazards" approach versus a singular focus on terrorism. The document *School Security: Selecting the Measures* is published by the South Yorkshire Police Community Safety Department.[170] The document states that good security management is about being proactive rather than reactive and emphasis should be placed on prevention rather than detection. The document goes into great detail, addressing areas such as:

1. School security risk assessments.
2. Establishing a risk management team.
3. Establishing a safety risk management policy.

[169] Nadav Morag (Professor, Naval Postgraduate School), e-mail communication, Monterey, CA, August 14, 2007.

[170] A. Foster "School Security: Selecting the Measures," (Sheffield, UK: South Yorkshire Police Community Safety Department.- n.d.)

4. External environment recommendations such as perimeter fencing, vehicle security and parking recommendations, defensive planting, one way systems, signage and security lighting.
5. Closed Circuit Television Systems (CCTV is used extensively throughout the U.K.)
6. Building shell recommendations including anti-scaling devices, doors with electronic locking mechanisms, use of a maximum thickness laminated glass in vulnerable areas.
7. Intruder alarm systems, including remote signaling alarm systems that send a signal to the police.
8. School office/reception access control, including use of identification badges and a single entrance point.

Again, this is only an overview of the detailed recommendations within the document; however all of the recommendations appear to be reasonable in terms of cost and ease of implementation. Many of these are similar to recommendations in various documents in circulation in the United States.

4. Summary and Preliminary Recommendations

While all three nations bear some similarity to the United States, the United Kingdom appears most similar when comparing the United States to the United Kingdom, Russia and Israel in terms of governmental structure, demographics and cultural norms. It must be noted, however, that Britain does not have a federal system of government, it has a different type of school system and far fewer law enforcement agencies than the United States. Russia and Israel clearly employ some aggressive measures possibly considered controversial or cost prohibitive to other nations; however these measures were most likely borne out of necessity, given the frequency and type of terror attacks respectively experienced by each.

A summary of useful practices from the United Kingdom, the Russian Federation and Israel are highlighted in four categories as follows:

Intelligence and Information Sharing:

1. School security should be a large system, with the most important component being the information and intelligence system.
2. Extensive use of technology, especially surveillance and counter-surveillance.

Training and Education:

1. Every employee in a school should be trained to react to emergencies.
2. Interagency Cooperation- Israel continually conducts realistic drills and scenarios with all agencies that will be involved in responding to an attack. They also include schools in the planning process, exercise simulations and critiques.
3. Public Education- A major education campaign complete with the distribution of necessary literature and safety/medical equipment to citizens.
4. Pre-emergency Planning/Operations/Response:
5. School officials must take on a tactical mindset.
6. Effective crowd control during an incident is critical to operations.
7. The National Police Force School Security Unit concept.
8. School security risk assessments.
9. Establishing a risk management team.
10. Establishing a safety risk management policy.

Physical Security Measures/Infrastructure:

1. The entire school compound should be fenced with iron doors at all exits, entrances and gates.
2. Gates should be electronic and open by remote control.
3. The use of advanced technology such as sensors and surveillance cameras.

4. The use of barriers and fences to provide security and buffer zones.
5. External environment recommendations such as perimeter fencing, vehicle security and parking recommendations, defensive planting, one way systems, signage and security lighting.
6. Closed Circuit Television Systems (CCTV is used extensively throughout the U.K.)
7. Building shell recommendations including anti-scaling devices, doors with electronic locking mechanisms, use of a maximum thickness laminated glass in vulnerable areas.
8. Intruder alarm systems, including remote signaling alarm systems that send a signal to the police.
9. School office/reception access control, including use of identification badges and a single entrance point.

B. CASE STUDY METRICS/METHODOLOGY

In order to measure the relative preparedness level of the three school districts selected for the case studies, the author developed a comprehensive set of metrics. These metrics were developed based upon the available literature and its wide-ranging recommendations, and working with local public safety personnel and school safety experts. Also incorporated were recommendations made at various school safety conferences and school safety planning courses. What resulted was a document designed to gather demographic information and to measure each district's level of preparedness based on the categories and subcategories listed below:

1. Prevention and deterrence

   This measures the district's overall ability to prevent and deter an attack.

   a. Risk and vulnerability

      Has the district conducted a formal risk and vulnerability assessment involving local public safety personnel to assist in developing the emergency plan?

   b. School resource officers (SRO's)

      Does the district employ full-time School Resource Officers and are they assigned to each building?

   c. Security

      Has the district employed the use of security measures such as surveillance cameras, magnetometers, and biowatch sensors? Do they utilize a card access system with 100 percent identification checks and have supervised points of entry for visitors?

   d. Intelligence

      Does the district restrict public access to school plans and perform background checks on staff and contractors?

2. Preparedness

   This measures the district's overall level of preparedness.

   a. Planning

      Has the district developed a written emergency plan for the entire district as well as each individual campus? Was the plan developed in collaboration with local response agencies? Is the plan reviewed and updated annually and maintained in multiple locations on and off campus? Have intergovernmental agreements been established to facilitate and allow legal sharing of information?

b. Organization

Have critical incident response teams been established with written job descriptions and alternate personnel assigned for all positions?

c. Equipment

Does the school have the necessary equipment and supplies to deal with an emergency, especially one of long duration? Does the school maintain a backup emergency power supply? Does the school have multiple methods of electronic communication?

d. Training

Has all staff been trained on the emergency plan? Is there an annual review of the emergency plan? Is key staff formally trained on how to use the incident command system in an emergency?

e. Exercises

Are tabletop and full scale exercises conducted annually with the involvement of public safety personnel? Do these exercises include law enforcement drills, building evacuation drills, bus evacuation drills, reverse evacuation and shelter in place drills? Are student accountability systems tested in concert with the drills?

3. Response

This examines the ability to effectively respond to potential as well as specific threats.

a. Potential threat

Are action plans in place to implement specific measures when the DHS threat level advisory system changes? Are there plans in place to deal with important dates or reports of other school violence or attacks?

b. Event specific

Are there event specific plans to deal with events such as a bomb threat, fire, intruder, active shooter, explosion, structural collapse, loss of power, chemical release, biological release, public health emergencies and radiological emergencies?

c. Functional procedures in place

Are there functional procedures in place such as hard lockdown, soft lockdown, building evacuation, bus evacuation and shelter in place?

d. Information and media management

Is there a designated public information officer and pre-established public information statements? Has there been prior coordination with the media?

e. Student accountability

Has a student accountability system been established considering transportation plans, relocation and alternate relocation sites?

4. Recovery

This measures the level of plans in place to facilitate psychological recovery and a return to normal operations.

a. Mental health preparedness

Have crisis intervention teams, formal plans, and family reunification plans been established?

b. Continuity of operations

Does a formal plan to continue education in the event of a prolonged closure exist? Have intergovernmental agreements been established with other school districts to share resources if necessary?

The case study methodology involved working with the persons responsible for safety and security in their respective school districts to complete the set of metrics and conducting interviews. The preparedness metrics are included as Appendix A in this document. The results are included in a narrative format within each case study section.

Interviews were conducted with the head administrators responsible for safety and security in each of the respective school districts. In addition to in-depth discussion regarding the preparedness metrics, each person was asked interview questions to determine:

1. Strengths of the emergency plan.
2. Weaknesses of the emergency plan.
3. Desired plan components or resources.
4. Budget or staff cuts that have negatively affected the emergency plan.
5. The administrator's view of the depth, breadth and quality of the emergency plan.
6. The administrator's view of the single most important thing a school can do to insure the safety and security of faculty, staff and students.

C. FAIRFAX COUNTY, VIRGINIA SCHOOL DISTRICT

Fairfax County Public Schools (FCPS) system is located in Virginia and is the nation's 13th largest school system, serving a student population of 165,000 with 247 campuses. FCPS maintains a faculty and staff of 22,000 and has an annual budget of $2.4 billion. Of the $2.4 billion, FCPS allocates $4 million to the office of Safety and Security. An additional $9 million is allocated to 150 school staff with safety and security responsibilities. This figure does not include the cost of School Resource Officers (SRO's), which are funded by the jurisdictional law enforcement agency, which assigns a full-time SRO to each building.

FCPS takes significant measures to insure the safety of all students and staff. Representatives from FCPS actively participate on Fairfax County local emergency

planning committees and emergency management teams. These groups are responsible for planning the community's response to potential threats. The FCPS plans have been referenced by the U.S. Department of Education, the U.S. Department of Homeland Security, and the American Prepared Campaign as national models.

The school district and all FCPS school campuses have comprehensive safety and security plans. The plans were designed through a multi-disciplinary collaborative approach with the involvement of school security staff members, as well as local law enforcement, fire, EMS, emergency management, and public health officials. Plans are reviewed and updated regularly. These plans include procedures to respond to a plethora of critical incidents, school personnel practice these drills regularly. FCPS not only involves other response agencies in planning efforts, but also provides its own staff to the Fairfax County Emergency Operations Center when the DHS threat level advisory system reaches the Red level.

The author interviewed Fred Ellis, the Director of FCPS Safety and Security. FCPS successfully meets the vast majority of the benchmarks listed in the preparedness metrics. The completed document is included as Appendix B. In the prevention and deterrence component, FCPS does not employ explosive or biowatch sensors due to cost and the newness and reliability of the technology. In the preparedness component, FCPS does not have pre-established agreements with local vendors, but is in the process of drafting an agreement that identifies them as a "priority client" in the event of a disaster.

FCPS does not currently include student and staff photos in the administrator response kit, but is investigating doing so in a digital format so that the information can be easily updated and is readily accessible. FCPS does not maintain food and water to self-sustain for 72 hours. Their rationale is that there is a ready supply through the food services operation and they cannot imagine a scenario where additional supplies would need to be maintaining at every campus. They have no plans to change the status quo in this regard. While all staff is trained in the emergency operating plan and receives annual refreshers, not all staff is trained in CPR, First Aid and Automated External Defibrillator (AED) use.

In the response component, FCPS has not established a formal information plan with the media, but maintains a close relationship through the Office of Community Relations. In the recovery component, FCPS does not have an established family reunification plan, but recognizes that this is very important and are working on a formal plan. FCPS has a continuity of operations plan for long term school closures by utilizing local television as well as the internet through an on line educational platform called Blackboard. The FCPS school board is currently discussing plans for pandemic flu and how to keep the educational system up and running.

An interview was conducted on January 10, 2008 with Fred Ellis, Director of Safety and Security.[171] Mr. Ellis explained that there are two levels of plans. There is the micro, which is individual school level, and the macro, which is the district wide plan. The strengths of the school level plan are that it is concise, directional, has key information and detailed response checklists. The strengths of the district wide plan are organization, breadth, comprehensive, the leadership team, administrative support and the integration with the Fairfax County Emergency Operating Center.

Conversely, Mr. Ellis stated that there are weaknesses of both plans. He stated that the weaknesses of both the school and system wide plans is that neither is strictly consistent with ICS and NIMS terminology. He argues that while ICS and NIMS are well suited for fire and law enforcement because they use it regularly, they don't work well for school staff because it is not used regularly. He believes that even with more training, it would still be difficult to be proficient at something that may be used once or twice in a career. Another weakness specific to the system-wide plan is the staff of the leadership team. The leadership team members are used to directing things, and not doing things. In an emergency, the members of the leadership team are expected to handle specific tasks.

FCPS has a goal to incorporate NIMS and ICS more effectively and train more often using the NIMS and ICS systems and would like to add more radio capacity for

[171] Fred Ellis (Director of Safety and Security, Fairfax County Public Schools), personal communication, Fairfax, VA, January 10, 2008.

better communications. Currently, none of the elementary schools have the ability to communicate with response agencies on a common frequency. They have to wait for district wide staff to arrive with the necessary equipment. Despite this fact, this year's budget process is considering taking away communication devices (Blackberrys and cellular phones) from several school administrators. Many of these administrators serve in critical roles on the leadership team, and hold key positions. Without these devices, they would have no method of communicating in an emergency other than a land line.

Mr. Ellis believes that the FCPS emergency plan rates as an eight or a nine on a ten scale, with ten being the best and asserts that the most critical thing that a school district can do is to have a comprehensive emergency plan and to practice it. He firmly believes that regular training is critical.

D. CHICAGO, ILLINOIS PUBLIC SCHOOLS

Chicago Public Schools (CPS) serves a student population of 420,000 with 655 campuses. CPS maintains a faculty and staff of 44,000 and has an annual budget of $5 billion. Of the $5 billion, CPS allocates roughly 1.5 percent to the office of Safety and Security. The author interviewed Andres Durbak, the Director of CPS Safety and Security. CPS successfully meets many of the benchmarks listed in the preparedness metrics, but does not meet some key components. The completed document is included as Appendix C. In the prevention and deterrence component, CPS employs School Resource Officers (SRO's), but does not have one assigned to every campus due to cost. CPS does not employ explosive or biowatch sensors due to cost and the newness and reliability of the technology. CPS does not utilize a 100 percent identification requirement and does not employ a card access control system. CPS has not completed a staff skills survey, which is a critical component in selecting staff to serve on crisis teams.

In the preparedness component, CPS has individual school level plans, but does not have a district wide plan. They are, however, currently in the process of developing one. CPS does not have pre-established agreements with local vendors, and is in not in the process of doing so. CPS does not maintain student and staff photos in the

administrator response kit and does not maintain a separate source of food and water to self-sustain for seventy-two hours. CPS does not maintain classroom status cards, which are helpful to response agencies during a lockdown to quickly notify them of the well being of everybody inside each classroom.

Training and exercises are the areas that CPS needs the most improvement in. They have had key staff complete only one ICS related training class of the four suggested and very few staff are trained in CPR, First Aid or automated external defibrillator use. While CPS conducts some exercises, many are not conducted and some are conducted sporadically at best.

In the response component, CPS has not yet developed a plan to deal with a major public health emergency such as a pandemic. They also do not have plans for bus rerouting and have not established alternate relocation sites. In the recovery component, CPS has established a crisis intervention plan and created teams; however they do not have any formal continuity of operations plans and have not established intergovernmental agreements with other school districts and entities to assist them in times of crisis. An interview was conducted on January 11, 2008 with Andres Durbak, the Director of Safety and Security for Chicago Public Schools.[172]

Mr. Durbak believes that the CPS plan is strong in that at the individual school level, for the first time in five years; greater than 90 percent of the schools had completed the review and update of their emergency plan by the deadline of October 1st. A new training program designed for new principals has also resulted in good plan compliance with the provided emergency plan template. Conversely, preparing and conducting drills has been a major weakness, even though they are required by state law (the Illinois School Safety Act). The individual schools need close supervision and the Office of Safety and Security does not have to staff to provide the required level of supervision.

Fortunately, CPS was recently awarded a grant through the Department of Education that will be used to create and implement more training for staff and parent

[172] Andres Durbak (Director of Safety and Security, Chicago Public Schools), personal communication, Chicago, IL, January 11, 2008.

groups. Funding will also be used to develop web-based support materials. However, CPS has experienced a 40 percent cut in security staff over the last five years alone. Another 5 percent cut is expected this budget year. The Office of Safety and Security used to have a director, deputy director and an associate director. Now the office just has the director position. There is little administrative support. Consequently, Mr. Durbak believes that the school level plans would rank an eight on a ten scale, but the district level plan, which is in the process of being developed, would rank a four.

In Mr. Durbak's opinion, the single most important thing a school can do to insure the safety and security of faculty, staff and students is restricting and controlling access to the buildings. Controlling access can be accomplished through a set of strict procedures, which doesn't cost anything. He points out that oftentimes schools take shortcuts and violate these policies for reasons of convenience. Accordingly, the Office of Safety and Security regularly sends out people to try and gain access to the buildings and then see if they are challenged by anybody once inside. Mr. Durbak also argues that funding is also critically important, citing that there are too many unfunded mandates and the State of Illinois ranks 49th of the 50 states in funding for education, yet Illinois mandates practices and procedures through the School Safety Act.

The America Prepared Campaign studied the specific terrorism preparedness in America's largest 20 school districts including CPS.[173] The 2004 America Prepared Campaign report was harshly critical of and gave CPS a failing grade at that time. Since that time, CPS has made some significant progress in preparedness initiatives. These new initiatives include:

1. The installation of security video systems at schools with high incidence of violence.

2. Provided the Chicago Police Department and Office of Emergency Management with access to CPS IP-based security camera systems.

3. Provided an intranet platform for the SRO's to improve reporting and facilitate information sharing.

[173] Phinney, *Preparedness in America's Schools*, 13.

4. Published a new edition of the CPS Emergency Management and Safe School Plan guides to be in compliance with the School Safety Act and NIMS.

E. ILLINOIS SCHOOL DISTRICT 207

School District 207 is located in Cook County, Illinois, approximately 20 miles from downtown Chicago. District 207 is comprised of three high schools: Maine East, Maine South and Maine West High Schools, encompassing a 36 square mile area and a population of 143,503 serving 7,000 students with a staff of 950. District 207 has gone through several versions of an Emergency Management Plan (EMP), with the most current draft having been produced in 2007. The EMP is comprised of four general areas: Introduction, functional procedures, incident specific response procedures, and appendices.

The functional procedures include specific guidelines for:

1. Hard lockdown
2. Soft lockdown
3. Heightened security
4. Evacuation
5. Reverse evacuation
6. Shelter-in-place

The incident specific response procedures include:

1. Bomb threat and bomb threat checklist
2. Fire
3. Intruder/hostage
4. Structural failure
5. Utility loss or failure

6. Severe weather
7. Hazardous material release
8. Pandemic flu
9. Natural gas leak

The appendices include an incident command structure, threat level advisory system, and emergency response team. Also included are: campus evacuation procedures, tables highlighting emergency responses and incident specific responses.

The author interviewed Dr. Rose Garlasco, the Assistant Principal of District 207 Maine South High School. District 207 successfully meets many of the benchmarks listed in the preparedness metrics, but does not meet some key components. The completed document is included as Appendix D. In the prevention and deterrence component, District 207 only meets seven of the ten security criterion. In the preparedness component, District 207 did not involve the local Emergency Management Agency (Maine Township EMA) or public health representatives in the planning process. They have not made the emergency plans available via the intranet to allow secure access by local public safety agencies. Moreover, no intergovernmental agreements have been established to legally allow the sharing of this information. They do not maintain a student transportation roster in the administrator response kit and therefore have no system of accountability for students in transit should an emergency occur on or off campus. Much like Fairfax and Chicago, they do not maintain a separate supply of food and water to self sustain for 72 hours.

The area of training and exercises is perhaps the most concerning. The faculty and staff are not formally trained on the emergency plan and it is not reviewed annually. The staff is not trained in CPR, First Aid or automated external defibrillator use. None of the staff have received formal NIMS or ICS training. The tabletop drills and exercises are sporadic at best and some types of drills are non-existent. For example, they do not conduct state mandated evacuation drills at the Maine South campus for fear that the students won't return if allowed to leave the building. In the response component, they fare better, meeting most of the criteria; however they do not have plans for bus rerouting

or radiological emergencies. They are currently working on a student accountability system. In the recovery component, they do not have formal family reunification plans established and do not have a continuity of operations plan.

Notwithstanding these serious shortcomings, District 207 has, however, created a very innovative practice. Staff from District 207 collaborated with staff from the Park Ridge Fire Department to establish a community-wide "Joint Community Resource and Recovery Team" program (JCRRT) for the communities of Park Ridge and Des Plaines. The intent of this program is to combine and integrate existing resources to respond to critical incidents that require counseling, debriefing and intervention by trained mental health professionals and clergy. Initially, the JCRRT concept focused on establishing an infrastructure and system to rapidly deploy the team to any school whose existing resources are insufficient to meet the demands of a critical incident. Now well established, the team has expanded its role to include response to any critical incident, crisis or disaster within Park Ridge and Des Plaines. The mission of JCRRT is:
"Providing mental health support services to Des Plaines and Park Ridge residents and responders in times of community crisis."

The JCRRT is an all-volunteer team represented by many organizations throughout the community. The organizational structure of JCRRT consists of two integrated components, the management team and first responders. The JCRRT has developed and implemented a comprehensive NIMS compliant operational plan and program. The JCRRT is an asset to the communities it serves and is part of the City of Park Ridge and City of Des Plaines emergency plans. As an asset, the JCCRT does not self-deploy but rather is requested by an appropriate organization that is managing the incident. The JCRRT has not yet been formally activated for a critical incident, but has exercised the plan through tabletop exercises. There exists a plan to integrate a JCRRT activation and response into a large-scale disaster drill, which will be scheduled in 2008.

An interview was conducted on January 11, 2008, with Dr. Rose Garlasco, Assistant Principal of Maine South High School and administrator of District 207.[174]

[174] Dr. Rose Garlasco (Assistant Principal, High School District 207), personal communication, Park Ridge, IL, January 11, 2008.

Garlasco feels that the strengths of the emergency plan are that it is comprehensive but concise and is not a cumbersome operations manual. Moreover, the same plan format is used at all three campuses, providing much needed consistency. On the contrary, there is no line item training budget to provide emergency response education to faculty and staff. Additionally, evacuation drills are not conducted for fear of students not returning to class. The faculty and staff are and has been a transient population which makes it extremely difficult to keep people current on emergency policies and procedures and there are no ongoing implementation and education strategies. The administrative section of the plan is very weak, and needs to be more thorough and include things like distribution and compliance statements, however Garlasco rate the plan as an eight on a ten point scale, *as compared to previous district plans*. Garlasco feels the single most important thing a school can do the enhance safety and security is to practice regularly.

F. STATE OF ILLINOIS SCHOOL SAFETY ACT

There is utility is evaluating state-level school safety initiatives and legislation as they directly affect and have an impact on schools at the local level. The State of Illinois has been relatively active in the arena of crisis and contingency planning for schools. Public Act 094-0600 (105 ILCS 128) - the School Safety Drill Act was signed into law August 16, 2005. Its purpose is to have public and private schools review their plans with first responders and to conduct school safety drills.[175] The Act "establishes the minimum requirements and standards for schools to follow when conducting school safety drills and reviewing school emergency and crisis response plans and to encourage schools and first responders to work together for the safety of children."[176] The Act applies to all public and private educational facilities that provide elementary or secondary education students under the age of twenty-one. Each school building is considered its own school, as opposed to the Act being applied district-wide. A

[175] ISBE, *All Hazard Preparedness Guide for Illinois Schools*.

[176] Ibid.

minimum of three evacuation drills, with the local fire department participating in one, are required annually. Additionally, one school bus evacuation and one shelter-in-place drill are required annually.

Unfortunately, the School Safety Drill Act falls short. While the Act requires a specified number of evacuation drills conducted by school staff and witnessed by local fire department officials, it does not require any law enforcement drills. Evacuation drills, shelter in place drills and bus evacuation drills are mandatory, but law enforcement drills, while recommended, are not. A law enforcement drill may include vital exercises such as lockdown, reverse evacuation, bomb threats and hazardous material release. The City of Chicago Public Schools lobbied against the original mandatory law enforcement component of the act, and it was thus "lobbied out" due to the cost of running 600+ law enforcement drills annually.[177] Millions of dollars are spent annually on fire protection and fire drills, yet no child has died in a school fire in more than 25 years meanwhile, multiple children have been slaughtered in school shootings, yet law enforcement drills are not mandatory as part of the School Safety Act.[178]

Title 29 part 1500, Joint Rules of the Office of the State Fire Marshal and the Illinois State Board of Education: School Emergency and Crisis Response Plans- effective August 18, 2006 establishes requirements for the annual review and updating of the protocols and procedures that is required in each school's emergency and crisis response plan required by the aforementioned School Safety Drill Act.[179] The Act requires that the annual review is documented in a report and signed by the school board or designee. The report should summarize recommended changes and state that those changes will be developed and implemented during the academic year. The report is also required to list the people and agencies involved in the review. The school board is required to send a copy of the report to each party that participated in the review and a copy is also sent to the regional superintendent of schools.

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[177] Randy Bravemen, (Instructor, School Security Training Program, Illinois State Board of Education), personal communication, Tinley Park, IL, November 15, 2007.

[178] Ron Ellis , (Project Director, School Security Training Program, Illinois State Board of Education), personal communication, Tinley Park, IL, November 15, 2007.

[179] ISBE, *All Hazard Preparedness Guide for Illinois Schools.*

The Illinois State Board of Education partnered with the Illinois Terrorism Task Force Public Information Committee to develop a "Multi-Hazard Emergency Planning Program for Illinois Schools." The statewide school security training program is designed to increase the capacity of schools to plan for and manage critical incidents. Two classes are being offered at no charge: "Forming Critical Incident Response Teams" and "Train-the-Trainer- Multihazard Emergency Planning for Illinois Schools." The pilot program was offered in 14 school districts to help make 207 schools and nearly 84,000 students more secure and better prepared.[180]

G. CHAPTER SUMMARY

The utility of examining the school protection practices in selected schools in the United States as well as abroad is clear. The smart practices as well as lessons learned gleaned from the analysis can be applied to enhance the safety and security of other schools. Fairfax County Public Schools is a leader in school protection and many practices can be applied uniformly. Much of their success can be attributed to specific budget allocation, formal planning processes, formal procedures, staff training and regular plan exercise. Chicago Public Schools have and still currently face many substantial challenges. They have experienced significant budget cutbacks and the level of preparedness has suffered as a result. They lack perhaps the most important element s of preparedness, which are staff training and regular exercise and evaluation programs. District 207 also faces considerable challenges. District 207's challenges can be addressed through strategic and specific recommendations for improvement. These recommendations are included in the next chapter and are a function of the research synthesized with an analysis of the case studies and the author's personal experiences in the field of homeland security.

[180] Office of the Governor, State of Illinois, "Gov. Blagojevich Announces Training Sessions to Help Make Schools Safer for Students and Staff : School Security Pilot Program Conducts First Training Session" *Governor Blagojevich Press Release* (January 13, 2005) http://www.illinois.gov/pressreleases/PrintPressRelease.cfm?SubjectID=3&RecNum=3625 (accessed October 26, 2006).

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VIII. RECOMMENDATIONS

A. PLAN FOR DISTRICT 207

Clearly, District 207 needs to make significant improvement in their emergency plan and in their overall preparedness level. District 207 does not meet many of the criteria in the preparedness metrics, notwithstanding Dr. Garlasco's opinion that the plan ranks as an eight on a scale of ten. District 207 is not currently in compliance with the requirements of the Illinois School Safety Act. Following are recommendations for improvement in the plan and the overall level of preparedness.

District 207 should have key staff; faculty, administrators and the School Resource Officer assigned to each of the three campuses attend the "Multi-Hazard Emergency Planning Program for Illinois Schools." This statewide school security training program is designed to increase the capacity of schools to plan for and manage critical incidents. Two classes are offered at no charge: "Forming Critical Incident Response Teams" and "Train-the-Trainer- Multihazard Emergency Planning for Illinois Schools." If District 207 cannot provide time for the personnel listed above, then the SRO's and a key administrator should attend the train-the-trainer program and deliver the education to the remainder of the key staff. This program provides important information and an excellent framework from which to develop a comprehensive plan.

District 207 does not have a comprehensive emergency and crisis response plan. While they have an established plan, it does not contain the following components that need to be incorporated into the existing plan:

1. A statement of purpose for the emergency and crisis response plan.
2. Mission and goals of the plan.
3. Description of the school's overall approach to emergency operations and statement about how and why the emergency plan will be implemented.

4. Description of each school, including student and staff population and any scheduled daily differences in population.

5. Information on students or staff with disabilities or special needs, including the number, location, and persons assigned to assist them during drills or emergencies.

6. Identify who will be responsible for making revisions to the emergency management plan and for disseminating to all agencies.

7. A list of hazards and vulnerabilities that could affect the school and their impact.

8. Clearly defined roles and responsibilities of emergency response team members.

9. Identification of the individual (by title) that is responsible for briefing new employees on the emergency plan and their role and responsibilities.

10. Identification of the individual (by title) that is responsible for scheduling and providing training to all students and staff in emergency response procedures.

11. Inventory of emergency supplies and equipment including radios (and frequencies), cell phones, etc.

12. The plan should contain detailed floor diagrams with utility shut off points, HVAC intakes and controls, hazardous materials storage, numbered door access, roof access doors, primary building evacuation routes, secondary building evacuation routes, disabled/handicapped evacuation routes, designated shelter-in-place locations, elevator locations, intercom system locations, and command post location.

13. The plan should contain an aerial site map of the campus and surrounding area with designated parent-student reunification site(s), fire department command post, police department command post, designated off-campus student evacuation sites (Maine South has this), alternate off-campus

student evacuation sites, off-campus school command post, off-campus media staging area, off-campus parent staging area, and on-campus gathering points/safe sites.

14. The plan should contain a detailed public information plan including pre-established statements for use in notifying the media, parents, faculty and students about any emergency situation.

15. The plan does not have an incident specific response procedure for radiological emergencies.

16. All three District 207 campuses are in close proximity of O'Hare International Airport and should have plans to deal with a plane crash at or in proximity to the school campuses.

17. The plan should contain family reunification procedures.

18. The district should consider the use of classroom status cards and incorporate the procedure into the emergency plan.

19. The plan should include a drop, cover and hold plan as a functional procedure.

District 207 needs to establish a formal plan for continuation of education in the event of a prolonged school closure and establish intergovernmental agreements with other school districts or facilities to conduct classes. District 207 should consider additional facility security measures such as the use of surveillance cameras with IP access capability that can be viewed off campus by public safety agencies. A 100 percent identification requirement should be mandatory for all students and staff and a card access control system should be implemented. A security system should be installed at each campus for after hours building monitoring and security.

All school staff should receive initial and annual refresher training on the emergency plan. The incident command team and the emergency response team members should complete incident command system training including NIMS IS-700, NIMS IS-800, ICS100 and ICS 200. Annual tabletop and full-scale exercises should be conducted

in cooperation with the local police and fire departments, the Maine Township Emergency Management Agency and representatives from Lutheran General Hospital.

The Illinois School Safety Act requires three evacuation drills annually. One of the three evacuation drills requires participation of the fire department. Each school must contact the fire department no later than September 1st of each year in order to arrange for the participation of the department in the drill. Each school must contact the fire department having jurisdiction no later than September 15th of each year to propose four dates within the month of October, during at least two different weeks of October on which the drill shall occur. The fire department is responsible for documenting and certifying that the school evacuation drill was conducted. The schools must conduct a minimum of one bus evacuation drill each year. This drill must be accounted for in the curriculum of all public schools. This curriculum shall include instruction in safe bus riding practices for all students. Schools are also required to conduct one severe weather and shelter in place drill which can also address scenarios such as a release of hazardous materials.

While law enforcement drills are not required by the School Safety Act, they are strongly encouraged. Drills should be conducted in cooperation and coordination with the law enforcement agency having jurisdiction to address and prepare for incidents including reverse evacuation, lock-downs, active shooter scenarios, bomb threats, explosions, or chemical or biological attacks. If a law enforcement drill is conducted, the appropriate law enforcement official shall certify that the law enforcement drill was conducted.

B. TEMPLATE FOR A REGIONAL APPROACH

While there are many available templates and best practices to utilize and draw upon, this research has revealed that a template by itself is wholly ineffective. It is not the template, but rather the process in which a school district creates and implements an emergency plan that is the key to a high level of preparedness. Certainly, school districts can utilize a template such as the federal *Practical Information on Crisis Planning: A Guide for Schools and Communities* available through the Department of Education.

They can also use a state guide such as the *ISBA/OSFM All Hazard Preparedness Guide for Illinois Schools* available through the Illinois State Board of Education; however, the process in which they utilize the template is critical to success.

What this research and analysis has demonstrated is that school districts must take advantage of, utilize and leverage the knowledge and resources available through local agencies such as law enforcement, fire, emergency medical services, emergency management, public health, and volunteer organizations. These organizations have expertise in the field of emergency planning, management and response and should be included in the school's emergency planning process at the onset. The wealth and diversity of experience will result in a comprehensive and robust plan that factors in the concerns germane to each of the respective agencies that have a stake in school protection and emergency response.

A plan by itself is worthless unless all stakeholders are trained on it and participate in an annual review and revision process. Tabletop drills and full scale exercises with all stakeholders should be conducted annually. States should pay particular attention to mandates regarding the minimum number and type of drills, such as those required by Illinois' School Safety Act. All school employees should be trained in CPR, First Aid and Automated External Defibrillator use. All key staff, particularly those with incident command and response team responsibilities should be trained on incident command principles and should complete IS700- National Incident Management System- An Introduction; IS800- National Response Plan; ICS100 and ICS200.

Funding effective safety and security measures and programs presents significant challenges, especially for cash-strapped schools located in impoverished areas. There are, however, funding mechanisms outside of the normal funding streams that schools can apply for, however federal funding for homeland security has becoming increasingly risk-based. The Department of Education and the Department of Homeland Security provide funding for emergency planning in schools. Additionally, the No Child Left Behind Act of 2001 provides that school districts applying for grants under the Safe

Schools and Drug Free Schools and Communities Program insure that they have a crisis management plan for responding to traumatic or violent incidents on school property.[181]

On August 29, 2007, U.S. Secretary of Education Margaret Spellings announced the award of $27 million in federal grants to 91 school districts in 32 states to assist them in improving and exercise emergency response management plans. In fact, since fiscal year 2003, DOE dispersed $130 million to 400 schools districts through this program. Spellings stated:

> Providing a safe learning environment for children is one of our most important duties as educators. These grants will support that effort by helping more school districts strengthen their crisis planning and better coordinate with the entire community to ensure the safety of our schools and students.

The Readiness and Emergency Management for Schools (REMS) grant program provides funds for school districts to develop and support their emergency management plans. The program also enables school districts to develop improved plans that address all four phases of emergency management: Prevention, Preparedness, Response and Recovery. School districts must pledge to develop written plans that are coordinated with state Homeland Security plans, support the implementation of the National Incident Management System (NIMS) and also prepare for a public health emergencies such as a pandemic. Funds can also be utilized to train school personnel and students in emergency management, disseminate emergency management plans and reunification procedures to parents and guardians, provide coordination with local emergency response agencies, purchase equipment, and collaborate with organizations responsible for recovery issues, such as health and mental health agencies. Some school districts in the State of Illinois have taken advantage of this grant program with Bloom Township High School District #206 in Chicago Heights, IL receiving $504,685, Winnebago County Unit School District #323 in Winnebago, IL receiving $99,880, West Chicago Elementary

[181] US, GAO, *Emergency Management*, 5.

School District #33 in West Chicago, IL receiving $98,983, Harlem School District in Machesney Park, IL receiving $247,450 and Chicago Public Schools District #299 in Chicago, IL receiving $927,370 in 2007. [182]

The Department of Education also provides funding to some school districts for emergency management planning through the Emergency Response and Crisis Management Program. DHS also provides funding to schools for emergency planning through the State Homeland Security Program, Urban Areas Security Initiative, and Citizen Corps grants.[183] Unfortunately, some DHS program guidance does not clearly identify school districts as entities to which state and local governments may disburse grant funds. States receiving this funding may not know whether such funding can be allocated to school districts and may not have the opportunity to benefit from this funding.[184]

[182] US DOE, "$27 Million in Readiness."

[183] US, GAO, *Emergency Management*, 7.

[184] Ibid., 1.

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APPENDICES

APPENDIX A. PREPAREDNESS METRICS

General Information	
Student enrollment	
Number of campuses	
Number of faculty and staff	
District annual budget	
Percent or amount of budget allocated to safety and security measures	
Grades serviced	

Prevention and Deterrence			
	Yes	No	Commentary
Risk and Vulnerability			
Conducted a risk and vulnerability assessment			
Involved local public safety personnel			
Used a formal model			
Used assessment to develop emergency plan			
School Resource Officer(s)			
Full time SRO			
SRO assigned to each building			
Security			
Surveillance cameras			
Magnetometers			
Explosive sensors			
Biowatch sensors			
Security system			
100% identification requirement			
Card access control system			
Supervised points of entry for visitors			
Visitor accountability system			

Internal security personnel (non-SRO)			
Intelligence			
Restrict access to school plans-no public access			
Background checks performed on personnel			
Background checks performed on contractors			
Staff skills survey completed			

Preparedness			
	Yes	No	Commentary
Planning			
Written emergency plan- district wide			
Written emergency plan- each campus			
Developed with input from local public safety agencies:			
Police			
Fire			
Public Health			
Office of Emergency Management (or equivalent)			
Reviewed and updated annually			
Plan maintained in multiple locations			
Plan maintained on and off campus			
Plan issued to local public safety agencies			
Plan web accessible- for official use only			
Intergovernmental agreements established to allow legal sharing of information			
Pre-established agreements with local vendors to facilitate rapid acquisition of supplies and equipment			
Organization			
Critical Incident Response Teams			

established			
Written job descriptions for all CIRT positions			
Alternate personnel assigned to each position			
Critical incident response kits for CIRT members prepared and staged			
Administrator response kit prepared with:			
Student transportation roster			
School and classroom attendance			
Emergency contact list			
Student and staff contact list			
Student and staff photos			
Aerial maps of school and campus			
Site plans and diagrams of school			
Door numbering system			
Parent contact list			
Equipment			
Food and water to self sustain for 72 hours			
Radios or phones assigned to response team members			
Radio with public safety frequency			
Medical supplies			
Emergency power supply (generators)			
Annual supply and equipment inventory			
Classroom status cards			
Training			
All staff trained on emergency plan			
Annual review with all staff			
All teachers trained in CPR and First Aid			
All teachers trained in AED use			
CIRT members or other key staff trained in Incident Command System			
NIMS IS-700			
NIMS IS-800			

ICS-100			
ICS-200			
Exercises			
Conduct tabletop drills			
Annually			
Include local public safety agencies			
Conduct full-scale exercises			
Annually			
Include local public safety agencies			
Conduct law enforcement drills			
Annually			
Conduct building evacuation drills			
Annually			
Conduct bus evacuation drills			
Annually			
Conduct reverse evacuation and shelter in place drills			
Annually			
Student accountability systems tested			

Response			
	Yes	No	Commentary
Potential Threat			
Action plans based on DHS threat level advisory system			
Action plans based on report of other school violence			
Heightened security plans for important dates (9-11, Columbine, etc)			
Event Specific Plans			
Bomb threat			
Fire			
Intruder			
Active shooter			
Explosion			
Structural failure			
Loss of power			

Severe weather			
Chemical release			
Biological release			
Public health emergency (pandemic, etc)			
Natural gas leak			
Radiological emergencies			
Functional Procedures in Place			
Hard lockdown			
Soft lockdown			
Evacuation			
Primary and secondary evacuation routes			
Reverse evacuation			
Bus evacuation			
Bus rerouting			
Shelter in place			
Information and Media Management			
Designated PIO			
Pre-established public information statements			
Pre-established media site(s)			
Prior coordination of plan with media			
Student Accountability			
Established student accountability system			
Established transportation plan			
Established relocation site(s)			
Established alternate relocation site(s)			

Recovery			
	Yes	No	Commentary
Mental Health Preparedness			
Established Crisis Intervention Team			
Established Crisis Intervention Plan			
Family reunification plan established			

Continuity of Operations			
Formal plan for continuation of education in the event of a prolonged school closure			
Established intergovernmental agreements with other school districts or facilities to conduct classes			

APPENDIX B. FAIRFAX COUNTY PUBLIC SCHOOLS PREPAREDNESS METRICS

General Information	
Student enrollment	Approx 165,000
Number of campuses	247
Number of faculty and staff	22,000
District annual budget	$2.4 Billion
Percent or amount of budget allocated to safety and security measures	My office budget = $4 million, plus school based staff (approx 150) estimated cost = $9 million. These figures do not count initiatives, such as door access technology implementation ($2 million) and other upgrades. Does not include cost of SRO's, paid for by the police.
Grades serviced	K-12

Prevention and Deterrence			
	Yes	No	Commentary
Risk and Vulnerability			
Conducted a risk and vulnerability assessment	X		
Involved local public safety personnel	X		
Used a formal model	X		Developed in-house
Used assessment to develop emergency plan	X		
School Resource Officer(s)			
Full time SRO	X		
SRO assigned to each building	X		High and Middle schools
Security			
Surveillance cameras	X		Only 9 schools have external systems
Magnetometers	X		Only HS's have handheld

Explosive sensors		X	
Biowatch sensors		X	
Security system	X		
100% identification requirement	X		
Card access control system	X		In Elementary and Middle schools
Supervised points of entry for visitors	X		
Visitor accountability system	X		
Internal security personnel (non-SRO)	X		At Middle and High schools
Intelligence			
Restrict access to school plans-no public access	X		
Background checks performed on personnel	X		
Background checks performed on contractors	X		
Staff skills survey completed	X		

Preparedness			
	Yes	No	Commentary
Planning			
Written emergency plan- district wide	X		
Written emergency plan- each campus	X		
Developed with input from local public safety agencies:			
Police	X		
Fire	X		
Public Health	X		
Office of Emergency Management (or equivalent)	X		
Reviewed and updated annually	X		
Plan maintained in multiple locations	X		
Plan maintained on and off campus	X		
Plan issued to local public safety agencies	X		
Plan web accessible- for official use only	X		
Intergovernmental agreements established to allow legal sharing of information	X		

Pre-established agreements with local vendors to facilitate rapid acquisition of supplies and equipment		X	
Organization			
Critical Incident Response Teams established	X		
Written job descriptions for all CIRT positions	X		
Alternate personnel assigned to each position	X		
Critical incident response kits for CIRT members prepared and staged	X		
Administrator response kit prepared with:			
Student transportation roster	X		
School and classroom attendance	X		
Emergency contact list	X		
Student and staff contact list	X		
Student and staff photos		X	
Aerial maps of school and campus	X		
Site plans and diagrams of school	X		
Door numbering system	X		
Parent contact list	X		
Equipment			
Food and water to self sustain for 72 hours		X	
Radios or phones assigned to response team members	X		
Radio with public safety frequency	X		At High and Middle Schools
Medical supplies	X		
Emergency power supply (generators)	X		
Annual supply and equipment inventory	X		
Classroom status cards	X		
Training			
All staff trained on emergency plan	X		
Annual review with all staff	X		
All teachers trained in CPR and First Aid		X	
All teachers trained in AED use		X	

CIRT members or other key staff trained in Incident Command System			
NIMS IS-700	X		All of these apply only to those staff involved in EOC operations
NIMS IS-800	X		
ICS-100	X		
ICS-200	X		
Exercises			
Conduct tabletop drills	X		
Annually	X		
Include local public safety agencies	X		
Conduct full-scale exercises	X		Limited occasions
Annually	X		
Include local public safety agencies	X		
Conduct law enforcement drills	X		The police train in our buildings regularly.
Annually	X		
Conduct building evacuation drills	X		
Annually	X		Monthly
Conduct bus evacuation drills	X		
Annually	X		
Conduct reverse evacuation and shelter in place drills	X		
Annually	X		
Student accountability systems tested	X		

Response			
	Yes	No	Commentary
Potential Threat			
Action plans based on DHS threat level advisory system	X		
Action plans based on report of other school violence			Not sure what this means
Heightened security plans for important dates (9-11, Columbine, etc)	X		We remind staff--extra vigilance
Event Specific Plans			
Bomb threat	X		

Fire	X		
Intruder	X		
Active shooter	X		
Explosion	X		
Structural failure	X		
Loss of power	X		
Severe weather	X		
Chemical release	X		
Biological release	X		
Public health emergency (pandemic, etc)	X		
Natural gas leak	X		
Radiological emergencies	X		
Functional Procedures in Place			
Hard lockdown	X		
Soft lockdown	X		
Evacuation	X		
Primary and secondary evacuation routes	X		
Reverse evacuation	X		
Bus evacuation	X		
Bus rerouting	X		
Shelter in place	X		
Information and Media Management			
Designated PIO	X		
Pre-established public information statements	X		
Pre-established media site(s)	X		
Prior coordination of plan with media		X	
Student Accountability			
Established student accountability system	X		
Established transportation plan	X		
Established relocation site(s)	X		
Established alternate relocation site(s)	X		

Recovery			
	Yes	No	Commentary
Mental Health Preparedness			

Established Crisis Intervention Team	X		
Established Crisis Intervention Plan	X		
Family reunification plan established		X	Not a formal plan, per se
Continuity of Operations			
Formal plan for continuation of education in the event of a prolonged school closure	X		
Established intergovernmental agreements with other school districts or facilities to conduct classes		X	

APPENDIX C. CHICAGO PUBLIC SCHOOLS PREPAREDNESS METRICS

General Information	
Student enrollment	420, 000
Number of campuses	655
Number of faculty and staff	44K
District annual budget	$5Bil
Percent or amount of budget allocated to safety and security measures	1.50%
Grades serviced	PreK-12

Prevention and Deterrence			
	Yes	No	Commentary
Risk and Vulnerability			
Conducted a risk and vulnerability assessment	x		
Involved local public safety personnel	x		
Used a formal model	x		
Used assessment to develop emergency plan	x		
School Resource Officer(s)			
Full time SRO	x		High Schools
SRO assigned to each building		x	
Security			
Surveillance cameras	x		

Magnetometers	x		
Explosive sensors		x	
Biowatch sensors		x	
Security system	x		
100% identification requirement		x	
Card access control system		x	
Supervised points of entry for visitors	x		
Visitor accountability system	x		Infrequent
Internal security personnel (non-SRO)	x		
Intelligence			
Restrict access to school plans-no public access	x		
Background checks performed on personnel	x		
Background checks performed on contractors	x		
Staff skills survey completed		x	

Preparedness			
	Yes	No	Commentary
Planning			
Written emergency plan- district wide		x	In process
Written emergency plan- each campus	x		
Developed with input from local public safety agencies:			
Police	x		
Fire	x		
Public Health	x		
Office of Emergency Management (or equivalent)	x		
Reviewed and updated annually	x		
Plan maintained in multiple locations	x		
Plan maintained on and off campus	x		
Plan issued to local public safety agencies	x		Subset w/pertinent info.
Plan web accessible- for official use only	x		
Intergovernmental agreements established to allow legal sharing of information	x		

Pre-established agreements with local vendors to facilitate rapid acquisition of supplies and equipment		x	
Organization			
Critical Incident Response Teams established	x		
Written job descriptions for all CIRT positions	x		
Alternate personnel assigned to each position	x		
Critical incident response kits for CIRT members prepared and staged	x		
Administrator response kit prepared with:			
Student transportation roster	x		
School and classroom attendance	x		
Emergency contact list	x		
Student and staff contact list	x		
Student and staff photos		x	
Aerial maps of school and campus	x		
Site plans and diagrams of school	x		
Door numbering system	x		Most schools
Parent contact list	x		
Equipment			
Food and water to self sustain for 72 hours		x	48 hrs
Radios or phones assigned to response team members	x		
Radio with public safety frequency	x		
Medical supplies	x		
Emergency power supply (generators)	x		Most schools
Annual supply and equipment inventory			
Classroom status cards		x	
Training			
All staff trained on emergency plan		x	Local
Annual review with all staff		x	Local
All teachers trained in CPR and First Aid		x	Some
All teachers trained in AED use		x	Some

CIRT members or other key staff trained in Incident Command System			
NIMS IS-700		x	
NIMS IS-800		x	
ICS-100	x		In process
ICS-200			
Exercises			
Conduct tabletop drills		x	Few
Annually		x	
Include local public safety agencies		x	
Conduct full-scale exercises		x	Few
Annually		x	
Include local public safety agencies		x	
Conduct law enforcement drills	x		
Annually	x		
Conduct building evacuation drills	x		
Annually		x	3/year
Conduct bus evacuation drills	x		
Annually	x		
Conduct reverse evacuation and shelter in place drills	x		
Annually	x		
Student accountability systems tested		x	

Response			
	Yes	No	Commentary
Potential Threat			
Action plans based on DHS threat level advisory system	x		
Action plans based on report of other school violence		x	
Heightened security plans for important dates (9-11, Columbine, etc)	x		
Event Specific Plans			
Bomb threat	x		
Fire	x		
Intruder	x		
Active shooter	x		

Explosion	x		
Structural failure	x		
Loss of power	x		
Severe weather	x		
Chemical release	x		
Biological release	x		
Public health emergency (pandemic, etc)		x	
Natural gas leak	x		
Radiological emergencies	x		
Functional Procedures in Place			
Hard lockdown	x		
Soft lockdown	x		
Evacuation	x		
Primary and secondary evacuation routes	x		
Reverse evacuation	x		
Bus evacuation	x		
Bus rerouting		x	
Shelter in place	x		
Information and Media Management			
Designated PIO	x		
Pre-established public information statements	x		
Pre-established media site(s)	x		
Prior coordination of plan with media	x		
Student Accountability			
Established student accountability system	x		
Established transportation plan	x		
Established relocation site(s)	x		
Established alternate relocation site(s)		x	

Recovery			
	Yes	No	Commentary
Mental Health Preparedness			
Established Crisis Intervention Team	x		
Established Crisis Intervention Plan	x		
Family reunification plan established	x		

Continuity of Operations			
Formal plan for continuation of education in the event of a prolonged school closure		x	In process
Established intergovernmental agreements with other school districts or facilities to conduct classes		x	

APPENDIX D. DISTRICT 207 PREPAREDNESS METRICS

General Information	
Student enrollment	7,000
Number of campuses	3
Number of faculty and staff	900
District annual budget	121,098,741
Percent or amount of budget allocated to safety and security measures	No specific line item for safety and security
Grades serviced	Grades 9 through 12

Prevention and Deterrence			
	Yes	No	Commentary
Risk and Vulnerability			
Conducted a risk and vulnerability assessment	X		
Involved local public safety personnel	X		
Used a formal model	X		
Used assessment to develop emergency plan	X		
School Resource Officer(s)			
Full time SRO	X		
SRO assigned to each building	X		
Security			
Surveillance cameras		X	
Magnetometers		X	
Explosive sensors		X	
Biowatch sensors		X	
Security system		X	

100% identification requirement		X	
Card access control system		X	
Supervised points of entry for visitors	X		
Visitor accountability system	X		
Internal security personnel (non-SRO)	X		20 SAFETY MONITORS
Intelligence			
Restrict access to school plans-no public access	X		
Background checks performed on personnel	X		
Background checks performed on contractors	X		
Staff skills survey completed	X		

Preparedness			
	Yes	No	Commentary
Planning			
Written emergency plan- district wide	X		
Written emergency plan- each campus	X		
Developed with input from local public safety agencies:			
Police	X		
Fire	X		
Public Health		X	
Office of Emergency Management (or equivalent)		X	
Reviewed and updated annually	X		
Plan maintained in multiple locations	X		
Plan maintained on and off campus	X		
Plan issued to local public safety agencies	X		
Plan web accessible- for official use only		X	
Intergovernmental agreements established to allow legal sharing of information		X	
Pre-established agreements with local vendors to facilitate rapid acquisition of supplies and equipment		X	
Organization			

Critical Incident Response Teams established	X		
Written job descriptions for all CIRT positions	X		
Alternate personnel assigned to each position	X		
Critical incident response kits for CIRT members prepared and staged	X		
Administrator response kit prepared with:			
Student transportation roster		X	
School and classroom attendance	X		
Emergency contact list	X		
Student and staff contact list	X		
Student and staff photos	X		
Aerial maps of school and campus	X		
Site plans and diagrams of school	X		
Door numbering system	X		
Parent contact list	X		
Equipment			
Food and water to self sustain for 72 hours		X	
Radios or phones assigned to response team members	X		
Radio with public safety frequency	X		
Medical supplies	X		
Emergency power supply (generators)	X		
Annual supply and equipment inventory	X		
Classroom status cards		X	
Training			
All staff trained on emergency plan		X	
Annual review with all staff		X	
All teachers trained in CPR and First Aid		X	
All teachers trained in AED use		X	
CIRT members or other key staff trained in Incident Command System			
NIMS IS-700		X	
NIMS IS-800		X	

ICS-100		X	
ICS-200		X	
Exercises			
Conduct tabletop drills	X		
Annually		X	
Include local public safety agencies	X		
Conduct full-scale exercises	X		
Annually		X	
Include local public safety agencies	X		
Conduct law enforcement drills	X		
Annually		X	
Conduct building evacuation drills		X	
Annually		X	
Conduct bus evacuation drills	X		
Annually	X		
Conduct reverse evacuation and shelter in place drills		X	
Annually		X	
Student accountability systems tested		X	Recently automated

Response			
	Yes	No	Commentary
Potential Threat			
Action plans based on DHS threat level advisory system	X		
Action plans based on report of other school violence	X		
Heightened security plans for important dates (9-11, Columbine, etc)	X		
Event Specific Plans			
Bomb threat	X		
Fire	X		
Intruder	X		
Active shooter	X		
Explosion	X		
Structural failure	X		
Loss of power	X		
Severe weather	X		

Chemical release	X		
Biological release	X		
Public health emergency (pandemic, etc)	X		
Natural gas leak	X		
Radiological emergencies		X	
Functional Procedures in Place			
Hard lockdown	X		
Soft lockdown	X		
Evacuation	X		
Primary and secondary evacuation routes	X		
Reverse evacuation	X		
Bus evacuation	X		
Bus rerouting		X	
Shelter in place	X		
Information and Media Management			
Designated PIO	X		
Pre-established public information statements	X		
Pre-established media site(s)	X		
Prior coordination of plan with media	X		
Student Accountability			
Established student accountability system		X	In process
Established transportation plan	X		
Established relocation site(s)	X		
Established alternate relocation site(s)	X		

Recovery			
	Yes	No	Commentary
Mental Health Preparedness			
Established Crisis Intervention Team	X		
Established Crisis Intervention Plan	X		
Family reunification plan established		X	
Continuity of Operations			
Formal plan for continuation of education in the event of a prolonged school closure		X	

Established intergovernmental agreements with other school districts or facilities to conduct classes		X	

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